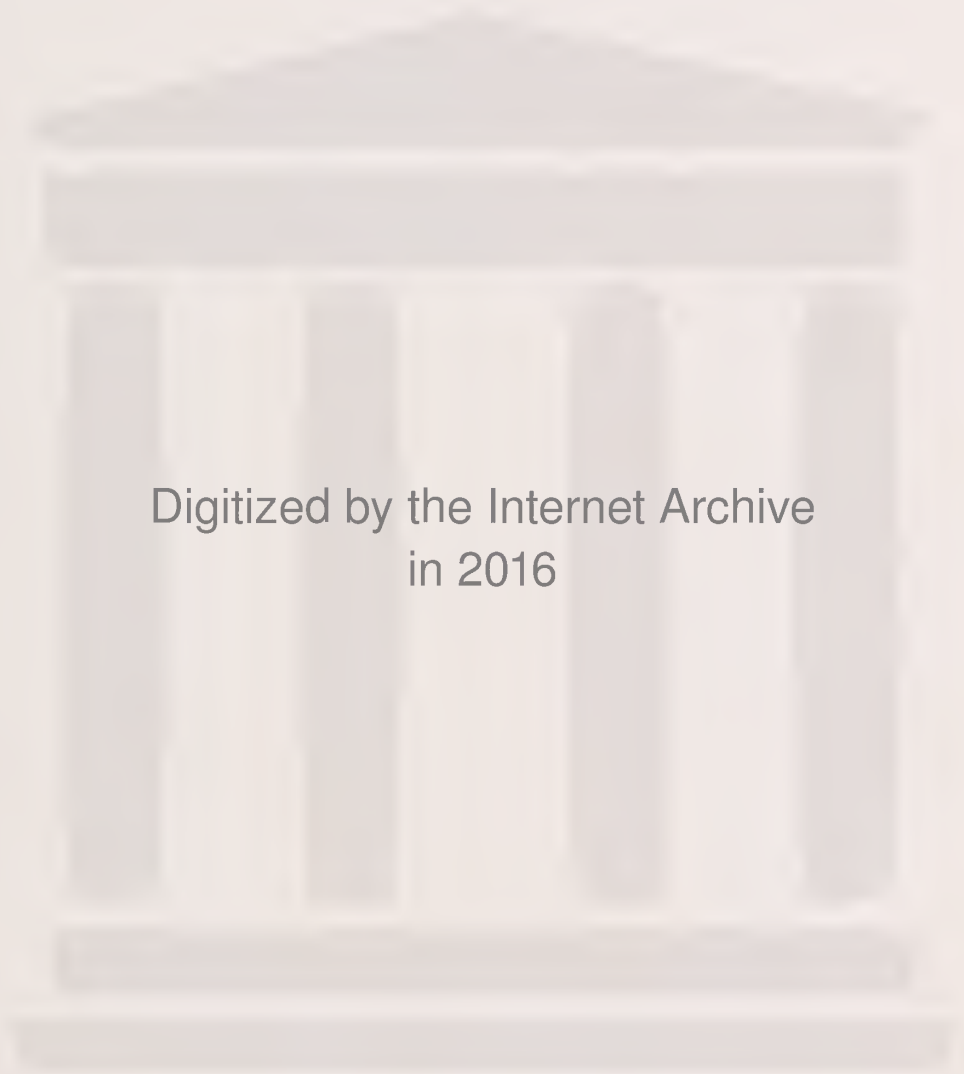
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JANUARY, 1970 • VOLUME 57 • NUMBER 1

OFFICIAL PUBLICATION OF THE FLORIDA MEDICAL ASSOCIATION INC.

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257 - 33 -

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride)

works on the appetite not on the 'nerves'

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libida, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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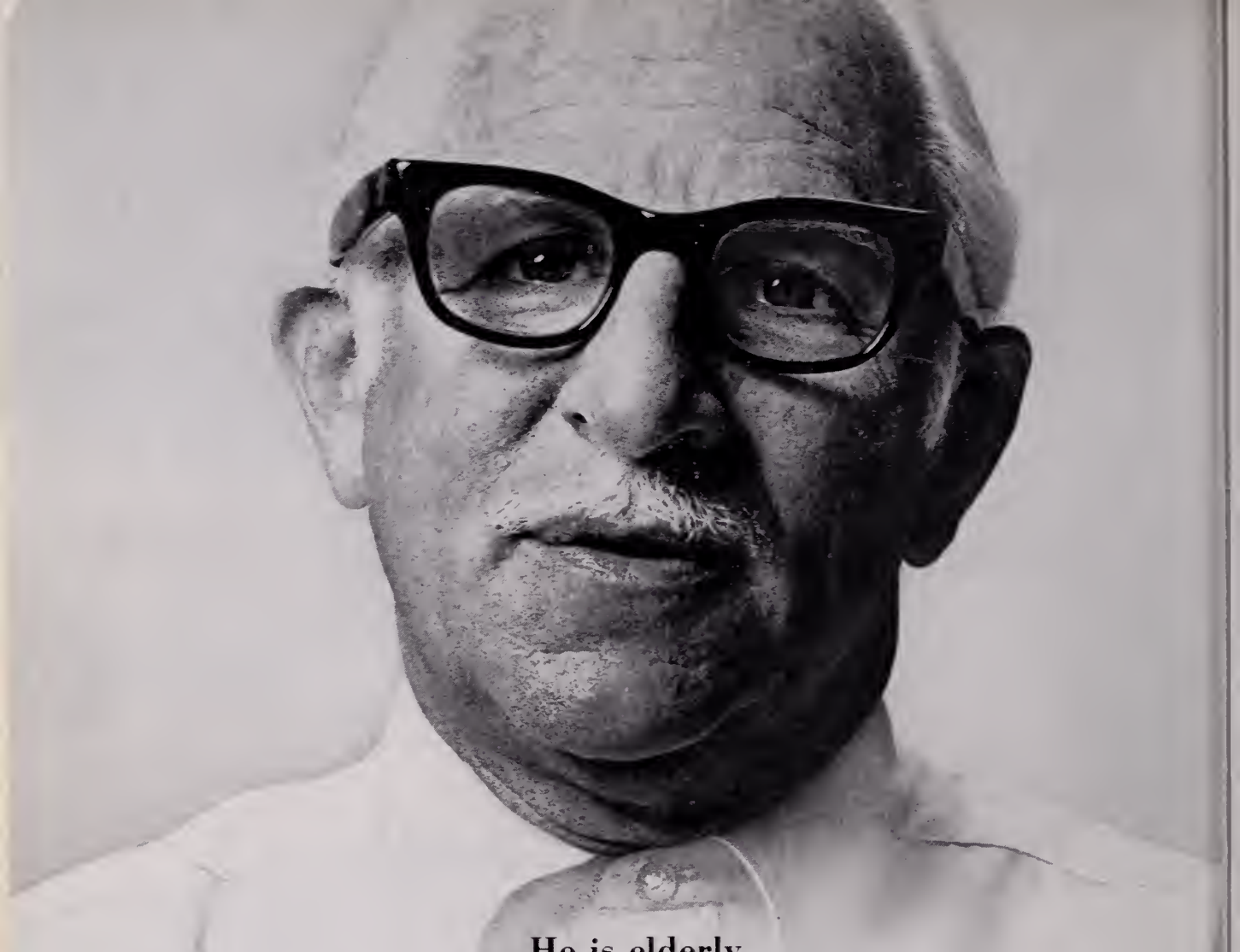
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He is elderly.
He is on corticosteroids.
When he needs an antibiotic
he may be a candidate for

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To guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of nystatin is combined with demethylchlortetracycline in DECLOSTATIN.

For your susceptible candidates, prescribe DECLOSTATIN—the broad-spectrum therapy that prevents monilial overgrowth.

Effectiveness: Because its antibacterial component is DECLOMYCIN Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropria measures should be taken. In infants, increased intracranial pressu with bulging fontanels has been observed. All signs and symptoms ha disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopa ular and erythematous rashes: a rare case of exfoliative dermatitis h been reported. Photosensitivity; onycholysis and discoloration of t nails (rare). Kidney—rise in BUN, apparently dose related. Transie increase in urinary output, sometimes accompanied by thirst (rare Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxi Teeth—dental staining (yellow-brown) in children of mothers given th drug during the latter half of pregnancy, and in children given the dru during the neonatal period, infancy and early childhood. Enamel hyp plasia has been seen in a few children. If adverse reaction or idiosyn crasy occurs, discontinue medication and institute appropriate therap Demethylchlortetracycline may form a stable calcium complex in an bone-forming tissue with no serious harmful effects reported thus fa in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should b given 1 hour before or 2 hours after meals, since absorption is impaire by the concomitant administration of high calcium content drugs, food and some dairy products. Treatment of streptococcal infections shoul continue for 10 days, even though symptoms have subsided.

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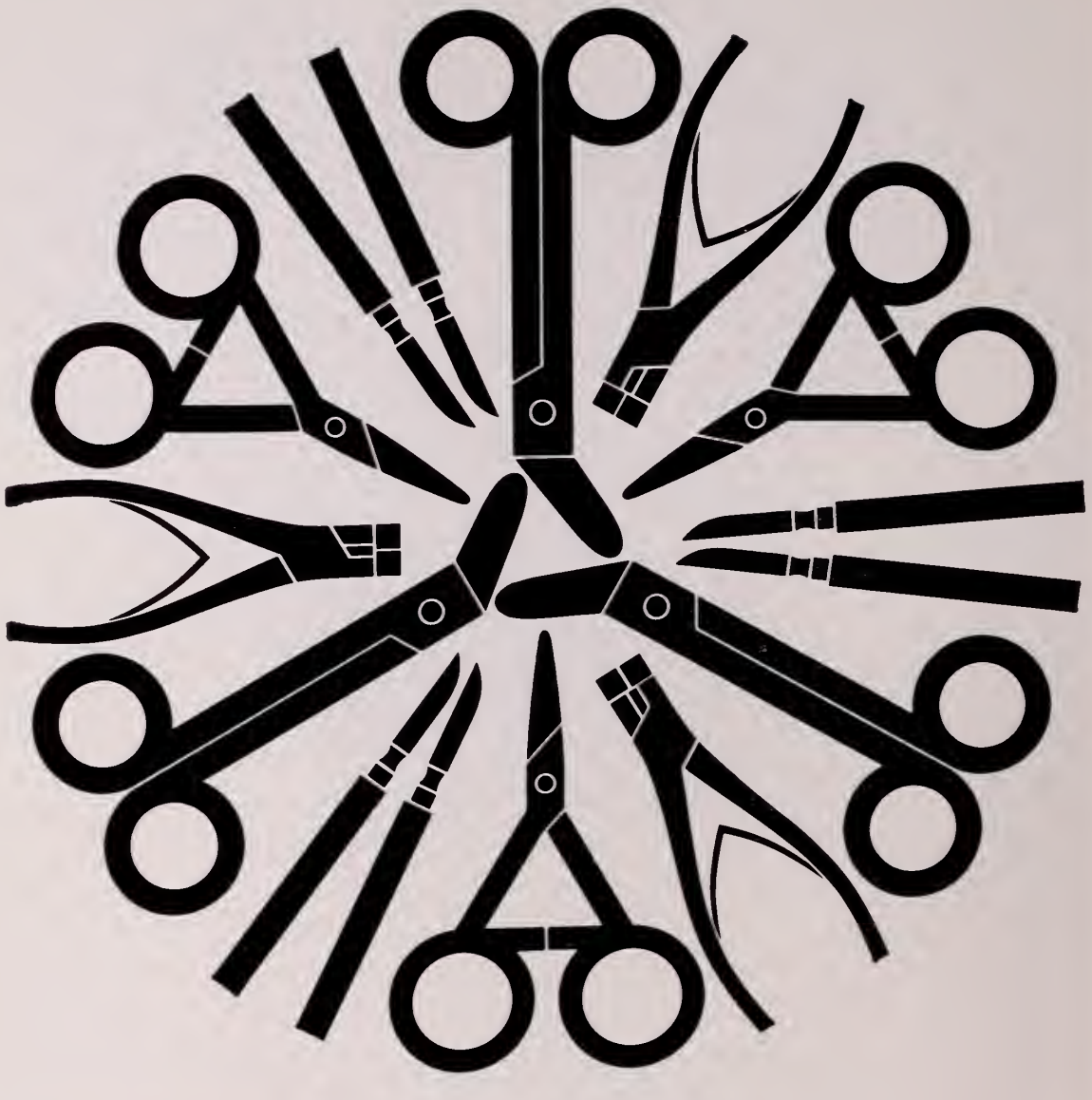
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before and after surgery



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Indications: Nutritional supplementation in conditions in which water-soluble vitamins are required prophylactically or therapeutically.

Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.

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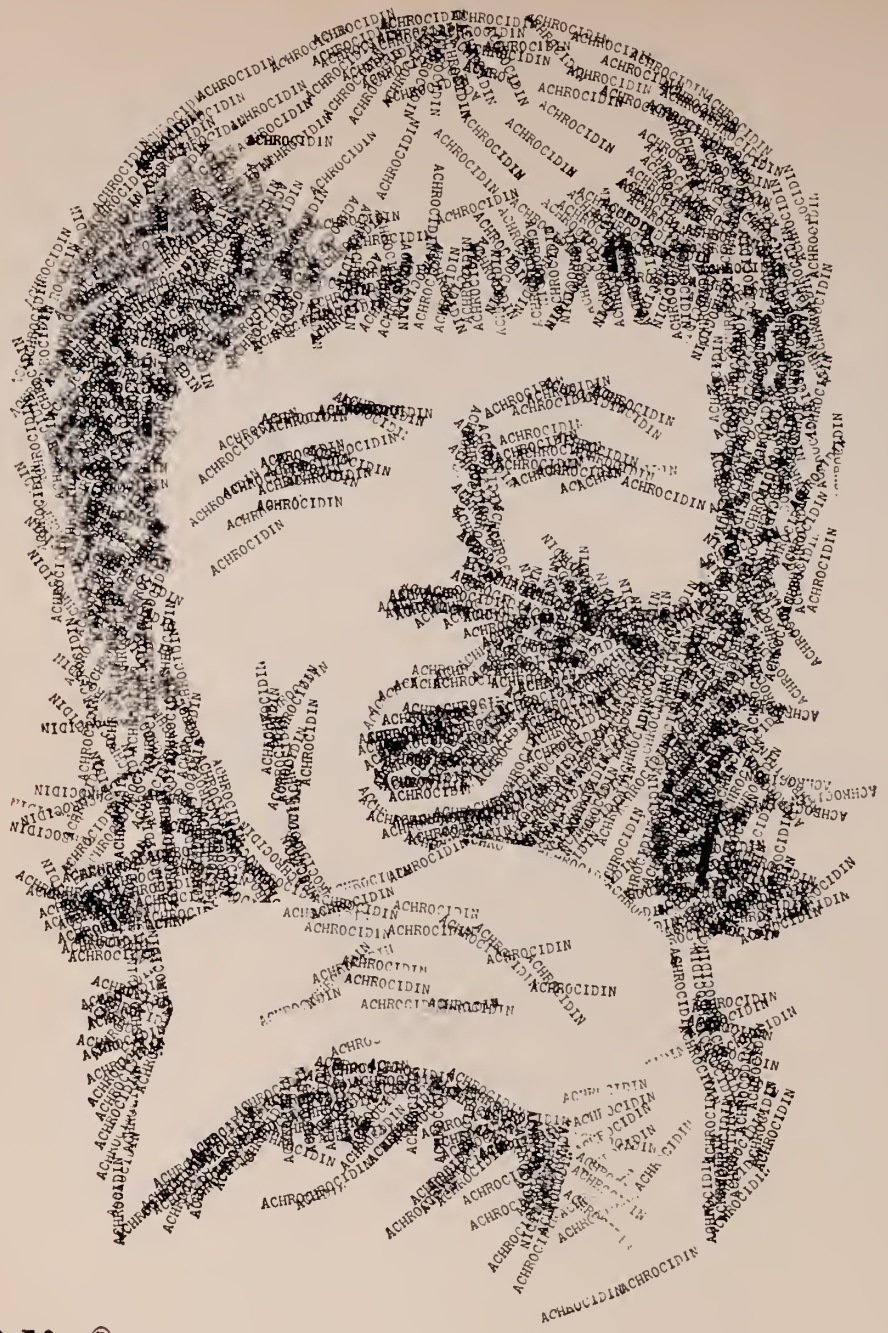
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Indications: Mucomyst has been demonstrated to be clinically effective as adjuvant therapy in a wide range of conditions in which thick, viscous mucus is a problem, including: postoperative atelectasis and pneumonia; chronic bronchopulmonary disease (emphysema, chronic bronchitis, asthma, and bronchiectasis); acute bronchopulmonary disease (pneumonia, bronchitis, and tracheobronchitis); tracheostomy care; facilitation of bronchial studies; maintenance of an open airway during anesthesia; and to help control pulmonary complications of cystic fibrosis. **Contraindications:** Mucomyst is contraindicated in those patients who are sensitive or who have developed a sensitivity to it. **Warnings: After proper administration of acetylcysteine, an increased volume of liquefied bronchial secretions may occur. When cough is inadequate, the open airway must be maintained by mechanical suction if necessary. When there is a large mechanical block due to foreign body or local accumulation, the airway should be cleared by endotracheal aspiration, with or without bronchoscopy. Asthmatics under treatment with Mucomyst should be watched carefully. If bronchospasm progresses, this medication should be immediately discontinued. Adverse Effects:** Adverse effects have included stomatitis, nausea and rhinorrhea. Sensitivity and sensitization to Mucomyst have been reported very rarely. A few susceptible patients, particularly asthmatics (see **Warnings**), may experience varying degrees of bronchospasm associated with the administration of nebulized acetylcysteine. Most patients with bronchospasm are quickly relieved by the use of a bronchodilator given by nebulization. **Administration & Dosage:** Mucomyst may be administered by nebulization into a tent, Croupette, face mask, or mouthpiece; or by direct instillation. **Mucomyst should not be placed directly into the chamber of a heated (hot-pot) nebulizer.** Complete details on dosage, administration, and compatibility are included in the package insert. Additional information may be obtained from Mead Johnson Laboratories. **Supplied: Mucomyst-10 (acetylcysteine)**, a sterile 10% solution, in vials of 10 ml. and 30 ml.; **Mucomyst (acetylcysteine)**, a sterile 20% solution, in vials of 10 ml. and 30 ml.

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Achrocidin® Tablets and Syrup

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

ACHROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatment of tetracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of the upper respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN Tetracycline equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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INFORMATION FOR AUTHORS

Manuscripts submitted for publication in the Journal of the Florida Medical Association should be double or triple spaced on white bond, including title page, illustration legends, tables and table headings, footnotes and references. Only original papers not previously published are considered for publication. Manuscripts submitted for publication are subject to review and approval by the Journal Publications Committee. All manuscript pages should be numbered consecutively. Within the manuscript, numbers one to ten should be spelled out except when used for units of measurement; for numbers above ten, arabic numerals should be used. Dorland's Medical Dictionary and Webster's International Dictionary may be used as standard references. Scientific (generic) names for drugs should be used when possible. Copyright or trade names should be capitalized when used. Submit *original* manuscript and two copies. Copying by electrostatic dry process (not wet process) is preferred to tissue copies. Retain one additional copy in your office for proofreading. All material is submitted with the understanding it is subject to editing.

Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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2. Its action is prompt, smooth, relatively non-cumulative: BUTISOL Sodium begins to work within 30 minutes... yet, because of its intermediate rate of metabolism, there is generally neither a "roller-coaster" nor a "hangover" effect.

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No wonder thousands of doctors turn to the relaxing sedative effect of BUTISOL Sodium on so many occasions: to help the usually well-adjusted patient cope with temporary stress... or to relieve anxiety associated with hypertension, coronary disorders, premenstrual tension, surgical procedures, functional GI disorders, and the strains of aging.

And—in any year—that's a pretty good record.

*Based on surveys of average daily prescription costs.

Contraindications: Porphyria or sensitivity to barbiturates.
Precautions: Exercise caution in moderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement or depression.
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Available as: Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (alcohol 7%). BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg., 30 mg., 50 mg., 100 mg.

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the Rx that says "Relax"

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For Your Information

Two months ago on this page I told you of the desires of your Board of Governors to make sure that you, each member of the FMA, be kept informed on the activities of your Association. Several avenues of communication were outlined. I hope we can continue to improve.

On Saturday, January 31st (this month), we are having a conference of the county presidents and secretaries. Other officers of your society are welcome. This is a major meeting which we have been planning for several months. Important facets of medical society activities (county, state, and national) will be discussed. *The strength of organized medicine lies in the local membership and leadership.* At this conference we can make reports to your leaders and get their advice and opinions. Some of the topics to be discussed will be professional liability, peer review mechanisms, workmen's compensation, medical economics, and other matters of real importance to you. Dr. Bert Howard, executive vice president of the AMA, will talk to us on current AMA problems. (The AMA met in Denver, Colorado in early December 1969 and debated serious matters.)

On Sunday, February 1, 1970, our legislative program will be discussed in detail. Your society officers and your legislative committee chairmen are especially urged to stay for this conference. It has been planned to explain very important aspects of medical legislation which will affect all of us. Again, we want the opinions and advice of your county leadership. Information appearing in the "Organization" section of this issue will explain more fully.

Through these two conferences, one on Saturday the 31st and the other on the following Sunday, your society leadership will be brought up to date. Any questions you have can be relayed by your officers who can report back to you. We also will prepare a summary report. From this source, as well as by the other methods I have previously outlined, we hope to improve our two-way communications and our relationships with each other.

Henry J. Baberough Jr.

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieve by holding a hot roasted onion to the ear.

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Contraindications. Edema, danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage, history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention), skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derma-

Sandy sails again!
After an arthritic flare-up.

His rheumatoid arthritis flared out of aspirin control.
It meant weeks of pain, stiffness,
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somebody else took advantage of.

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100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings and contraindications. Read the prescribing information. It's summarized below.

s, Stevens-Johnson syndrome, ll's syndrome (toxic necrotizing dermolysis),or a generalized rgic reaction similar to serum kness may occur and require manent withdrawal of medica-n. Agranulocytosis can occur ddenly in spite of regular, repeated mal white counts. Stomatitis d, rarely, salivary gland enlarge-nt may require cessation of treat-nt. Such patients should not eive subsequent courses of the g. Vomiting, vertigo and languor y occur. Leukemia and leukemoid ictions have been reported. While t definitely attributable to the g, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

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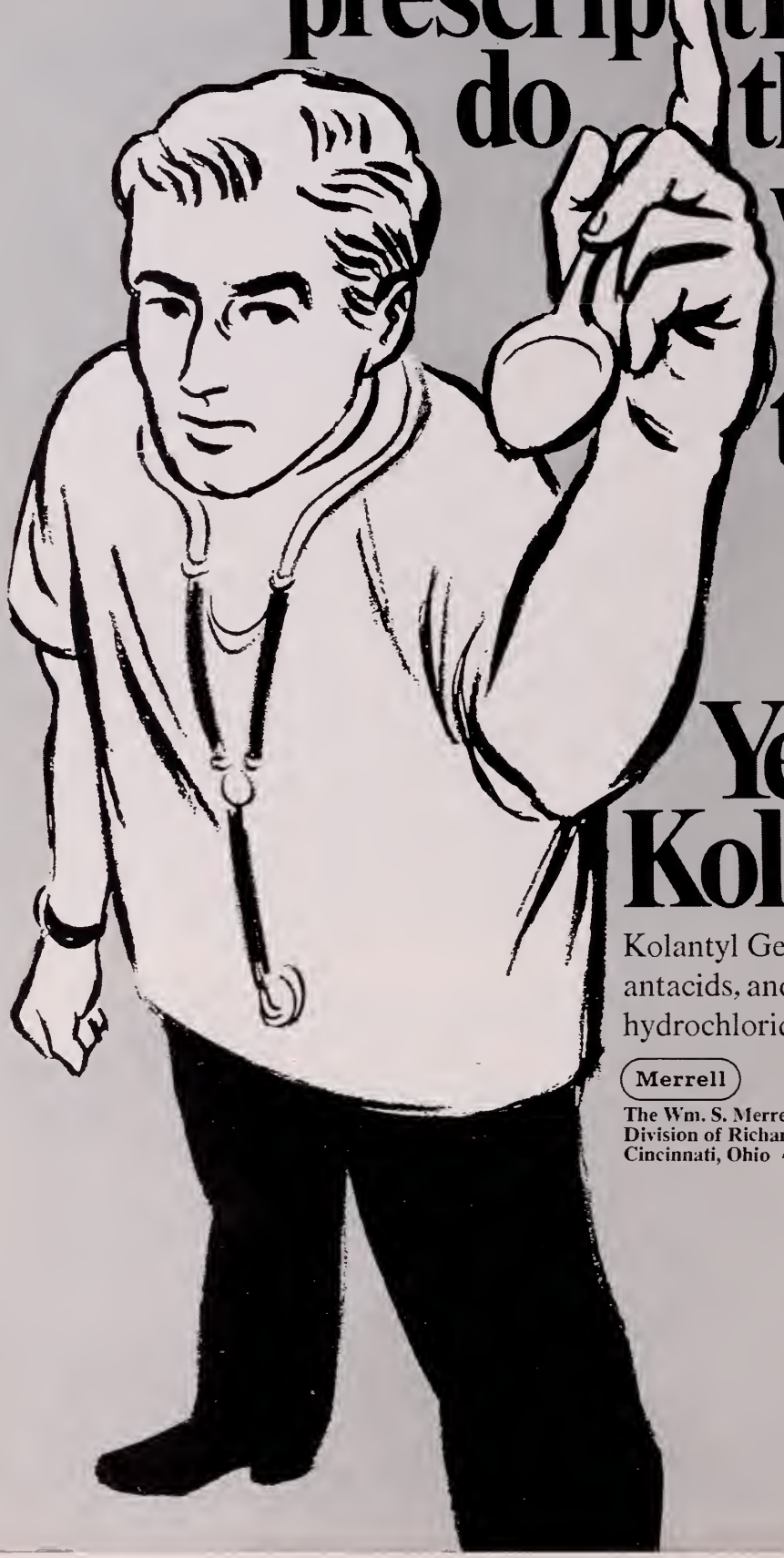
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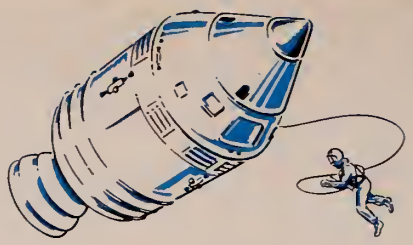
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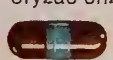


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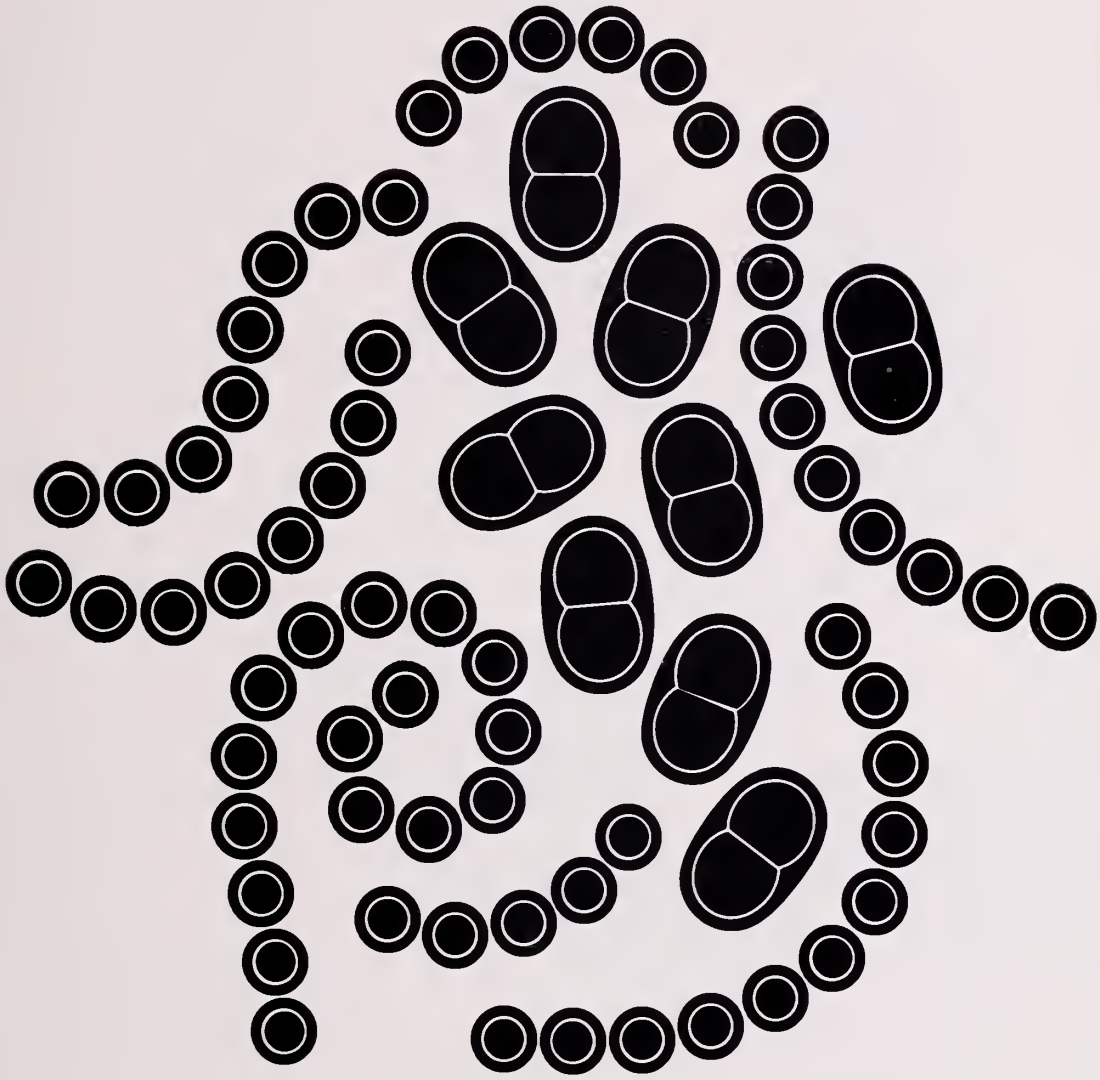
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Seminar on Infectious Diseases

Infections of the Central Nervous System

W. Eugene Sanders Jr., M.D.

Five of the presentations from the Nineteenth Annual Postgraduate Seminar of Mount Sinai Hospital of Greater Miami, held May 8-10, 1969, were published in the September, 1969 issue of the Journal. The Seminar was entitled "Infectious Diseases—Clinical and Practical" and marked formal association of the hospital and the University of Miami School of Medicine. The remaining three papers from the seminar, questions and answers and editorial comment are included in this issue. Collectively these presentations comprise a comprehensive examination of infections of the central nervous system. The authors of the three papers that follow are distinguished educators and scientists.

Dr. Paul F. Wehrle is Hastings Professor of Pediatrics at the University of Southern California School of Medicine in Los Angeles. At present, while on sabbatical, he is travelling extensively for the World Health Organization-sponsored smallpox eradication program.

Dr. N. Joel Ehrenkranz is professor of medicine and chief of the Infectious Diseases Division at the University of Miami School of Medicine. He is widely recognized for his contributions to clinical science and epidemiology.

Dr. Morton N. Swartz is associate professor of medicine at Harvard Medical School and chief of the Infectious Disease Unit of the Massachusetts General Hospital. Dr. Swartz has served on the editorial board of the New England Journal of Medicine and is currently pursuing his research interests at Stanford during his sabbatical year.

The editors wish to thank these authors for their contributions and acknowledge the assistance of Dr. Marvin L. Meitus, who chaired the symposium on infectious diseases.

Dr. Sanders is associate professor of medicine and microbiology at the University of Florida College of Medicine, Gainesville.

Pitfalls in the Management of Central Nervous System Infections

Paul F. Wehrle, M.D.

Despite advances in control of many infectious diseases of man, there is no immediate prospect for prevention of bacterial infections of the central nervous system. In addition, many viral infections and those due to acid-fast organisms or fungi present special problems in both differential diagnosis and management. The reduction of disability and death due to this important group of infections is dependent upon early clinical recognition of the disease, accurate and specific laboratory diagnosis, vigorous supportive and antimicrobial therapy and attention to rehabilitative measures. Numerous pitfalls lie in wait for the clinician, both in determination of the specific problem and during the course of therapy. Some of the common problems which have been encountered are recorded and described here.

Identification of Organism

In order to provide prompt and specific therapy, it is necessary to identify the organism as accurately as possible. Petechial smears in patients with meningococcal meningitis with cutaneous lesions are often helpful; however, spinal fluid examination is required for most central nervous system infections.

Although obtaining spinal fluid is a simple procedure, the patient must be adequately restrained, preferably in the lateral position, and the skin prepared by adequate (alcohol and iodine, with removal of iodine) or other satisfactory cleansing technique. Introduction of additional pathogens has been reported following spinal tap, although the risk is minimal providing adequate care is taken. In young infants the dural sac lies close to the skin. If the needle is advanced too far, the nucleus pulposus may be entered with extraction of gelatinous material containing elliptical cartilage cells.

Dr. Wehrle is Hastings Professor of Pediatrics at the University of Southern California School of Medicine, Los Angeles, and chief physician, Children's Division, Pediatrics and Communicable Disease Services, Los Angeles County—University of Southern California Medical Center.

New microscope slides must be used for examination of the sediment from spinal fluid. No glass slide can be cleaned adequately for bacteriologic examination if it has been used for other purposes previously. Should unusual organisms be suspected, proper culture media should be inoculated as indicated for subsequent identification of anaerobic, fungi, or acid-fast organisms.

Since overwhelming infections, particularly those due to pneumococci, at the extremes of life may result in large numbers of organisms in the spinal fluid prior to cellular response, every sample obtained should be cultured and sediment examined by the gram stain technique. This also occurs with meningococcal infections since a few organisms may be present in the spinal fluid before cellular response appears.

Providing care is taken in the examination, bacterial central nervous system infections can be correctly diagnosed on the basis of a gram-stained smear in at least 50% of patients upon entry into the hospital. Fluorescent antibody techniques, while often helpful in confirming the diagnosis, are neither more accurate nor more sensitive than conventional techniques in experienced hands, providing proper cultures are made.[1] In an additional 30% of cases bacteria may be recovered on culture, thus yielding a specific diagnosis in approximately 80% of patients with bacterial meningitis. Approximately 3% of these cases will be due to unusual organisms. It is helpful, particularly for interns, residents and laboratory personnel who are relatively inexperienced in identification of the common organisms, to maintain a collection of reference slides and stained control slides of identified organisms indicating proper gram-negative and gram-positive staining results. These may be used for comparison at the time the spinal fluid is examined.

Selection of Antibiotic

Attention must be given to selection of antibiotics with the greatest bactericidal activity

against the specific organisms. The intravenous route should be employed for most antimicrobial agents unless specifically contraindicated by the nature of the drug. By using this route, problems associated with shock, with poor circulation, delay in absorption from the injection site, and local tissue damage resulting from large quantities of drug administered subcutaneously or intramuscularly are avoided.

Special problems are encountered in selecting antimicrobial therapy for newborns, due to the wide variety of microorganisms likely to be responsible for disease in that age.[2,3] Those with communicating sinus tracts, endocarditis, or surgical procedures involving the central nervous system also present similar problems. A suggested approach is given in Table 1. Patients in whom there are reasons to suspect infections with unusual organisms should receive treatment as suggested for young infants until the specific organisms have been identified. A penicillinase-resistant penicillin is suggested if staphylococcal disease is suspected.

Some antibiotics, for example polymyxin B, do not diffuse well into spinal fluid and supplementary therapy by the intrathecal route must be used. Since many infections occur in young infants, attention should be given to potential toxicity, particularly eighth nerve damage, when providing therapy. More detailed information concerning the specific choice of drugs has been published recently.[2,3]

Complications of Infection

Symptomatic subdural effusions are among the more common complications of infection. These are seen in approximately 10% of young infants with bacterial meningitis, but are rarely a problem among older patients. Most of these effusions clear within three weeks, providing daily subdural taps are performed. Up to 15 cc. of fluid from each side may be removed daily using a short-bevel needle with stylette. Suction must not be used to accelerate drainage. After three weeks of conservative management, relatively few patients will require surgical correction.

If brain abscess is suspected on the basis of localizing neurological signs, an angiogram or brain scan is often helpful in localization. The echo encephalogram has been of relatively little value. Antecedent or concurrent illness is helpful in suspecting the correct bacterial etiology of the abscess. Those secondary to otitis media or mastoiditis are likely to be pneumococcal, while endocarditis is more likely to be followed by staphylococcal or streptococcal lesions.

The blood pressure must be monitored frequently, and if shock is present an indwelling venous catheter is helpful in monitoring the circulatory status. Rapid infusion of fluid (saline, albumin or blood) will frequently restore effective circulation. If central venous pressure increases without concomitant improvement in circulation, isoproterenol by intravenous drip may provide a beneficial response. Convincing data are not yet available to show clinical benefit from the use of large (pharmacologic) doses of hydrocortisone or other glucocorticoids. These do, however, provide appropriate physiologic changes in circulation.

Either mannitol or urea may be used if cerebral edema is suspected. Full therapeutic doses are required and rapid infusion is needed to insure maximum diuresis. Neither of these agents is as effective in acute inflammatory central nervous system disease as following brain trauma. If either of these drugs are used, attention must be given to electrolyte balance. Intravascular clotting remains a problem. Despite correction of the coagulation defect, death usually supervenes.[4]

Table 1.—Suggested Therapy for Patients Without Evident Immunological or Mechanical Defect or Underlying Disease.

Age of Patient	Initial Therapy Until Organism Identified	Definitive Therapy After Organism Identified
< 2 mo	Ampicillin* 75-150 mg./kg./day I.V. + Kanamycin 15 mg./kg./day	Dependent upon specific susceptibilities of organisms.
2 mo. and older	Ampicillin 150 mg./kg./day I.V.	Meningococci=Penicillin G or ampicillin Pneumococci=Penicillin G or ampicillin *H. Influenzae*—Ampicillin Purulent unknown=Ampicillin

* Must be given intravenously. One-third of estimated daily dose by rapid I.V. infusion followed by 1/6 of daily dose by rapid I.V. infusion at 4 hour intervals. Dose is 75 mg./kg./day during the first week of life—150 mg./kg./day thereafter.

Although various enzymes (e.g., plasmin activators such as streptokinase) will lyse fibrin clots, there are no data which would assure benefit from their use in patients with unusually purulent spinal fluid.

Persistent fever is frequently encountered during therapy despite effective control of the CNS infection. Some of the common causes are listed in Table 2. These include phlebitis at the site of intravenous infusions which may occur either with or without definite superinfection. While the chemical phlebitis associated with infusion of some antibiotics is self-limited and relatively harmless, superinfections may be associated with serious bacteremias. Abscesses are occasionally seen at the site of local injections and may be difficult to locate. Cerebral abscesses particularly those due to acute or chronic mastoiditis or associated with endocarditis may be a cause of persistent fever, while subdural effusions are particularly common among young infants. Occasionally sepsis is seen at the tracheotomy site. Use of uretheral catheters is prone to induce urinary tract infection, despite scrupulous technique. Some infections, notably severe meningococcal disease with extensive areas of hemorrhage, may induce persistent fever until the area of hemorrhagic necrosis has demarcated and no longer serves as a site of pyrogen formation.

Of all the causes of persistent fever, that due to the drug itself is the most deceptive. No localizing signs are seen, no areas of necrosis are present, and the patient does not appear toxic. The only method of proving this etiology is discontinuation of the suspect drug. If additional therapy is necessary, change to an unrelated drug is at times necessary. Occasionally readministration of the drug responsible for fever does not induce recurrent pyrexia. Drug fever has been observed most commonly with sulfonamides, chloramphenicol and penicillin. However, almost any drug has potential to induce drug fever.

Duration of Antimicrobial Therapy

Continuous therapy by the intravenous route is usually required for at least ten days. Patients should always be afebrile for a minimum of five days, and repeat spinal tap should be performed before the drug is discontinued. The spinal fluid at this time should show fewer than 30 cells, a normal concentration of sugar and a protein concentration of 50 mg./100 cc. or less.

Table 2.—Causes of Persistent Fever Despite Appropriate Antimicrobial Therapy.

1. Phlebitis with or without superinfection
2. Abscess (local or cerebral)
3. Subdural effusion (especially young infants)
4. Foreign objects:
   Tracheotomy
   Urethral catheters
5. Continuing tissue necrosis
6. Drug fevers

Caution is required in discontinuing therapy in young infants, patients with gram-negative enteric bacterial infections and those in which a brain abscess, chronic mastoiditis, or endocarditis is suspected. Therapy for these patients should be continued for a minimum of three weeks and, in the case of endocarditis, for the period indicated by the underlying infection.

After therapy has been discontinued it is desirable to observe the patient for an additional 48 hours. Long term administration of oral antibiotics following cessation of intensive therapy is not recommended, since this approach often masks recurrence and delays definitive therapy.

Summary

The common pitfalls and problems associated with management of acute bacterial infections of the central nervous system have been reviewed. Optimal results in terms of low mortality and minimal morbidity are aided by observance of the points outlined. It should be emphasized that these infections are acute medical emergencies and should be treated as such. One of the most commonly overlooked, yet important, portions of management is institution of rehabilitative measures and special education techniques if indicated. Despite the best therapy currently available, deafness, blindness and motor disability does occur and is a particular problem among young infants. The physician's responsibility for the management of the disease continues until careful re-evaluation during convalescence has defined areas of functional loss and maximal rehabilitation has been achieved.

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Anaerobic Bacteria in Central Nervous System Infections

Morton N. Swartz, M. D.

The importance of anaerobic bacteria in infections in man has been generally underestimated, probably because of the somewhat specialized techniques required for isolation of these organisms and failure to appreciate the frequency of their implication in specific types of infections. Such infections include endometritis, intra-abdominal abscesses, bacteremia and endocarditis, a constellation of pulmonary problems (bronchopneumonia, lung abscess, empyema) and central nervous system infections. The latter category will be the sole focus of the present consideration.

General Features of Anaerobic Infections

Predisposing Factors

Most of the anaerobes involved in human infection are normal saprophytic inhabitants of the skin and mucosal surfaces, including the mouth, nose, pharynx, lower intestine and vagina. Only under special circumstances do they appear to become invasive and cause disease. Such circumstances usually involve the lowering of the oxidation level in the tissues. This might occur secondary to impairment of local circulation by vascular occlusion, shock and edema. Tissue destruction is another important factor that can lower the oxidation-reduction potential of tissues and contribute to pathogenicity of anaerobes. This may be induced by trauma or by infection with another, aerobic, organism. The frequency with which anaerobes are found in mixed infections with other, aerobic, organisms bespeaks the importance of the latter relationship.

Components of the Anaerobic Flora

Clinicians are generally quite familiar with Clostridium perfringens and the features of clostridial infections including gas gangrene. However, there is less awareness of the nature and potential pathogenic role of other members of the anaerobic flora. For this reason we will devote our consideration to these nonsporulating anaerobic bacteria (Table 1). Anaerobic streptococci and micrococci are normally present in the mouth, oropharynx, lower intestine, and in the vagina. Actinomyces israelii, the species involved in human actinomycosis, is indigenous to the mouth particularly about the teeth and throat of man. Anaerobic diphtheroids are normal inhabitants of the skin (Corynebacterium acnes) and mucous membranes. A good deal of taxonomic confusion exists regarding the species in the Bacteroides group, consisting of anaerobic gram-negative bacilli. Included among those species most clearly identified as indigenous to man are Bacteroides funduliformis (also known as Sphaerophorus necrophorus), Bacteroides fragilis, Bacteroides melaninogenicus (a pigmented species) and Fusobacterium fusiforme. In the present consideration no attempt is made to identify the individual species and the term Bacteroides is applied to gram-negative bacilli which grow on anaerobic but not aerobic plates. These organisms are normally found in the mouth, oropharynx, lower intestine and female genital tract. Veillonella are anaerobic gram-negative cocci with much the same distribution as anaerobic streptococci.

Central Nervous System Infections

The category of pyogenic central nervous system infections includes five processes: 1. bacterial meningitis, 2. cerebral abscess, 3. subdural empyema, 4. epidural abscess, 5. suppurative cerebral venous thrombophlebitis. Of these, meningitis and cerebral abscess are by far the most frequent and our attention will be directed exclusively to them. In order to gain some perspective it will be helpful initially to take an overview of the bacterial species, both aerobic and anaerobic, implicated in these infections. To provide a sizeable sample I have summarized the bacteriologic findings from 15 series[1-15] (787 cases) of cerebral abscess culled from the literature during the past

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From the Department of Medicine, Harvard Medical School, and the medical service (Infectious Disease Unit) of the Massachusetts General Hospital, Boston.

Table 1.—Nonsporulating Anaerobic Bacteria of Clinical Importance.

Gram-positive anaerobes
Anaerobic streptococci
Actinomyces
Anaerobic micrococci
Anaerobic diphtheroids
Gram-negative anaerobes
Bacteroides species
Veillonellae

18 years (Fig. 1). The percentages given are of the total cultures obtained from the abscesses themselves. Because more than one organism was isolated from some of the abscesses the total number exceeds somewhat the number of cases included. For purposes of comparison, these findings are contrasted with those in 207 cases of bacterial meningitis in patients of all age groups seen at the Massachusetts General Hospital between 1956 and 1963.[16]

Several generalizations can be made immediately on looking at these data. In the first place one can readily see that cerebral abscess is very seldom if ever a complication of bacterial meningitis as judged by the striking differences in the bacteriology of the two processes. Thus, while the pneumococcus, Hemophilus influenzae, and meningococcus are the "big three" of bacterial meningitis and together account for over two thirds of the cases, they are responsible for less than 8% of cases of cerebral abscess. In contrast, three other categories of organisms are predominant in cerebral abscess: streptococci of all types (Gp. A, other "groupable" strains, Strep. viridans, anaerobic and microaerophilic strains, etc.); members of the family Enterobacteriaceae (E. coli, Klebsiella, Enterobacter, Proteus, etc.), and Staphylococcus aureus. Together these account for over 60% of the cases. Another important generalization concerns the frequency with which several organisms simultaneously are implicated. Mixed bacterial meningitis is distinctly uncommon, occurring in our experience in less than 0.5% of cases. However, in 14% of the 787 cases of brain abscess (Fig. 1) two or more organisms were found. Indeed, in some cases as many as three or four different species were cultured simultaneously at operation. Anaerobic organisms were isolated from 12% of the 787 cases of brain abscess. This certainly represents a minimum figure when one considers that often anaerobic cultures were not performed (22% of all cultures showed no growth) or cultures were taken in thioglycollate broth, where, in mixed infections, facultative aerobic organisms might easily have overgrown and obscured companion anaerobes. In this compilation the types of cases reported and the bacteriologic techniques employed were quite varied. This variation accounts for the marked disparity between series, some showing few if any anaerobes and others, like that of Heineman and Braude,[5] implicating anaerobes in 88% of cases. The true overall position of anaerobes probably lies somewhere between these extremes. The major anaerobic species in brain abscess consist of anaerobic streptococci, Bacteroides, and Actinomyces in that order of frequency. Less common anaerobes include Veillonella, anaerobic diphtheroids, and Clostridium perfringens. Anaerobic organisms are rarely the cause of bacterial meningitis, but occasionally one sees a case of C. perfringens meningitis secondary to head trauma or Bacteroides meningitis secondary to bacteremia or to spread of infection from a focus of chronic mastoiditis. One of the 207 cases of meningitis in the series[16] from Massachusetts General Hospital was due to C. perfringens.

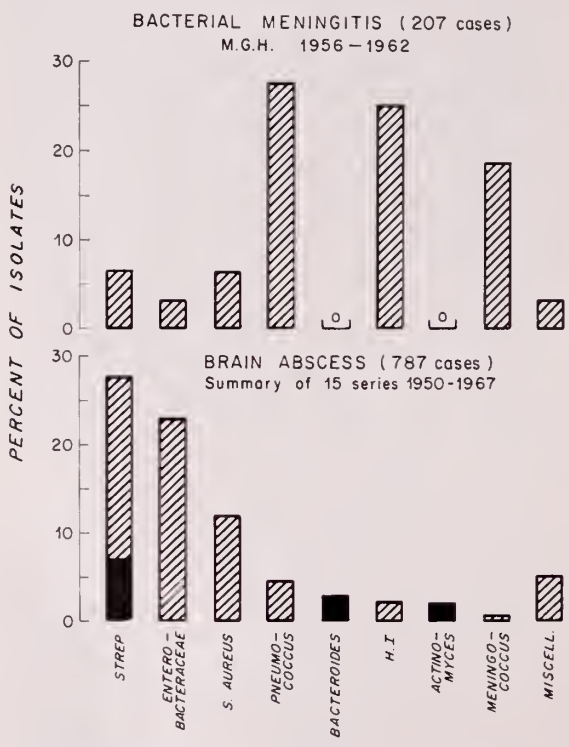


Fig. 1.—Comparison of the bacteriology of meningitis and brain abscess; a compilation. Anaerobic species are shown as solid black bars.

To analyze a series of cases of cerebral abscess studied more recently with relatively uniform bacteriologic techniques, 60 cases seen in the period 1957-1968 at the Massachusetts Gen-

eral Hospital are recorded in Figure 2. Again streptococci, Enterobacteriaceae, and S. aureus accounted for 75% of the cases, and simultaneous mixed cultures were found in 23%. Sixteen percent of the isolates involved anaerobic organisms: anaerobic streptococci and Bacteroides, not infrequently together in the same lesion. Although these organisms may be associated with gas production in tissue, such was not observed on skull film in any of our cases.

The characteristics of cerebral abscesses are not uniform, much depending on the location of the initiating focus of infection. Thus, the bacteriology of otogenic brain abscess might differ significantly from that of hematogenous brain abscess. This can be seen in Table 2 where recent cases at the Massachusetts General Hospital have been classified as to the portal of entry. The brain abscesses due to Enterobacteriaceae were almost exclusively secondary to chronic otitis media and mastoiditis. This was particularly true of infections due to Proteus. S. aureus brain abscesses were most often a consequence of bacteremia (usually a feature of acute endocarditis) or postcraniotomy operative wound infection. Bacteroides brain abscess, in our experience, has most often complicated chronic mastoiditis with cholesteatoma formation. In contrast anaerobic streptococci have been isolated equally frequently from otogenic abscesses and those due to metastatic spread via the bacteremic route. The latter include patients with chronic pulmonary infections as well as a patient with a right-to-left shunt associated with the tetralogy of Fallot.

The localization of cerebral abscess further supports the prominent relationship of anaerobic abscesses to an antecedent chronic otitic focus. In Figure 3 are schematically represented the sites of the cerebral abscesses due to anaerobes in our series and that of Heineman and Braude.[3] The majority of abscesses are clustered in the temporal lobes and cerebellum, in keeping with their otogenic origin. Parietal lobe abscesses are most often of hematogenous origin, but hematogenous abscesses may occur in any lobe.

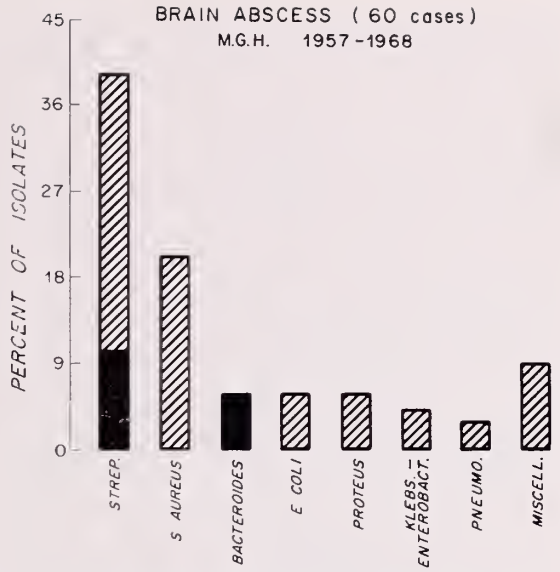


Fig. 2.—Role of anaerobes in 60 cases of brain abscess seen at Massachusetts General Hospital from 1957 to 1968. Anaerobic species are shown as solid black bars.

Treatment of Cerebral Abscess Due to Anaerobic Bacteria

Central to the successful treatment of brain abscess is the early recognition of the process. Although fever is usually the hallmark of infection, in our experience almost one third of patients have been afebrile. Under these circumstances those manifestations related to the cerebral site of involvement have attracted initial attention and suggested the diagnosis of brain tumor, cerebral thrombosis, or any of a variety of neurologic or psychiatric disorders. The development of brain abscess following a recent exacerbation of chronic otitis media or following recent mastoid surgery may be obscured as the result of preoccupation with the otitic process. Under these circumstances the relation of further nausea, fever and increased headache to intracranial extension of the process may be overlooked. In such patients only by careful search for evidences of temporal lobe signs—such as upper homonymous quadrantanopia, and in dominant hemisphere lesions, Wer-

Table 2.—Relation of Initiating Focus for Cerebral Abscess to the Bacterial Species Involved.

	Cases	Otogenic	Rhinogenic	Hematogenous	Postcraniotomy
Enterobacteriaceae	13	11			
S. aureus	16	4		7	4
Bacteroides	5	4			
Anaerobic strep.	7	3		4	
Other strep.	22	5	4	6	1
Anaerobic diphth.	1	1			

nicke's aphasia (misuse of words and an inability to read, write and understand spoken words) or a lesser degree of aphasia (inability to name common objects)—or by search for cerebellar signs will the diagnosis be suspected. One form of presentation of cerebral abscess that is often misleading but extremely important to recognize is that of "acute meningitis." Such patients may exhibit stiff neck and a brisk cerebrospinal fluid polymorphonuclear pleocytosis associated with the early phase of brain abscess ("bacterial encephalitis") or, more commonly, with intraventricular leakage or rupture of the abscess. The patient's condition may improve initially under antibiotic therapy only to worsen subsequently as the effects of the enlarging intracerebral mass lesion become evident. The appreciation of the existence of this phenomenon, a recognition of underlying foci of infection (chronic suppurative pulmonary disease, chronic otitis media), a detailed inquiry into possible neurologic symptoms prior to the onset of meningitis, and the performance of a careful neurologic examination may lead to the early detection of this type of process.

The definitive treatment of an established brain abscess, whether due to an aerobic or anaerobic organism, involves surgery. The basic surgical approaches consist of either primary excision or initial aspiration. The former has the advantage of being definitive treatment and is considered the only way of treating multiple or multilocular abscesses.[1, 17] The vigorous employment of antimicrobial therapy in concert with surgery has effected a striking reduction in the mortality from this disease. High blood levels of the appropriate antibiotics are essential about the time of surgery and subsequently to prevent extension of the process during operative manipulation, particularly when aspiration is the only procedure employed. No matter how well encapsulated an abscess may be, infection is invariably present in the surrounding tissue. If this is not properly handled by high dose antibiotic therapy, satellite abscesses may become manifest in the postoperative period. Anaerobic organisms can proliferate in the depths of necrotic, avascular tissue and can only be reached and attacked when high concentrations of bactericidal agents are delivered for prolonged periods. Thus, the proper use of antibiotics is even more imperative in infections due to anaerobes.

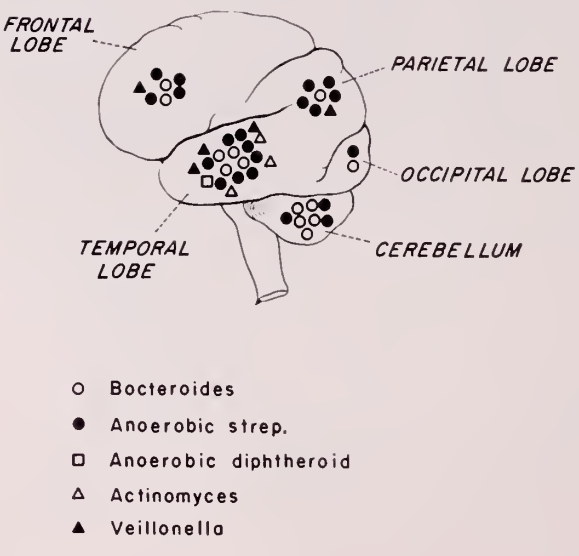


Fig. 3.—Cerebral localization of anaerobic brain abscesses; compilation from Heineman and Braude[5] and current series at Massachusetts General Hospital.

In view of the varied bacterial flora found in cerebral abscesses and particularly in view of the frequent occurrence of mixed infections, no single antibiotic is likely to be sufficient prior to bacteriologic confirmation at the time of surgery. A combination of penicillin and tetracycline has been suggested as the treatment of choice for most anaerobic infections of the brain.[5] The high frequency of a streptococcal etiology and the susceptibility of most strains of Actinomyces and some strains of Bacteroides to penicillin make this drug an important part of any therapeutic program. Tetracycline would be valuable in dealing with those Bacteroides strains resistant to penicillin. It has been our practice to treat brain abscess with aqueous penicillin G intravenously at a daily dosage of 20,000,000 units in the adult; chloramphenicol (3-4 Gm./day intravenously) has been used with penicillin as the second drug because of its activity against most strains of Bacteroides and of some of the Enterobacteriaceae. Therapy would subsequently be modified on the basis of the results of examination of the gram-stained smear of the abscess and of the aerobic and anaerobic cultures taken at the time of surgery.

Performance of Anaerobic Cultures

Proper handling of the specimen is essential since the inaccessibility of the involved area precludes repeated cultures. Examination of a gram-stained smear of the abscess contents will pro-

vide some clues as to the nature and number of species involved. Since many of the anaerobes are sensitive to the ambient O_2 tension, the material should be cultured immediately under strict anaerobic conditions on enriched blood agar plates. Unquestionably the most reliable method involves the use of the commercially available anaerobic (Brewer) jar for incubating culture plates. This involves removal of oxygen by means of reaction with hydrogen or illuminating gas under the influence of a shielded, electrically heated platinum-asbestos catalyst. In recent years our bacteriology laboratory has turned to a procedure in which the jars are "flushed" three times with a gas mixture consisting of 90% N_2 and 10% CO_2. Steel wool in a $CuSo_4$ solution is used to combine with any residual oxygen in the incubator.

Summary

The role of anaerobic bacteria in human infections, particularly central nervous system infections (cerebral abscesses), is an important one and one that has been generally underestimated. Anaerobic streptococci, Bacteroides and Actinomyces, are the principal species that have been implicated. Chronic otitis media is frequently the portal of entry for development of brain abscess due to anaerobic organisms, and the sites of predilection appear to be the temporal lobes and cerebellum.

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Cerebritis, Aseptic Meningitis and Encephalitis

Individual and Community Implications

N. Joel Ehrenkranz, M. D.

Precise definition of disease is important for both the patient and the community. In this presentation, aseptic meningitis, cerebritis and encephalitis will be defined. Meningoencephalitis is a confusing term, with little clinical usefulness.

Aseptic Meningitis

Aseptic meningitis is a superficial central nervous system infection involving the meninges, manifest by spinal fluid pleocytosis, headache, fever and minimal to moderate signs of meningeal irritation. There is relatively little, if any, brain involvement. Aseptic meningitis due to virus infection is almost always benign. Coxsackie viruses Group A, types 1-24, and Group B, types 1-6, ECHO viruses types 1-34, and the agents of encephalomyocarditis, mumps and infectious mononucleosis are the common causes of the aseptic meningitis syndrome.

Although serological and virologic techniques are available for accurate diagnosis, why bother when treatment is only symptomatic?

The fact that a patient's aseptic meningitis syndrome is due to one of these viruses, and is not another disease presenting as aseptic meningitis, is reassuring in terms of prognosis. Poliomyelitis, beginning as an aseptic meningitis, used to be a terrible problem. It may be a threat again if immunization programs are not maintained. There are other serious infections whose onset may be that of the aseptic meningitis syndrome. Knowledge of the type of infection with these agents is also important to the community. Enteric viruses generally are brought into a family by a child and disseminated to the adults. Hospital dissemination of enteric virus infection can occur. An outbreak that involves large numbers of people may bave economic implications if work and school absenteeism is high.

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Cerebritis

Cerebritis is a deeper central nervous system infection particularly intense in the outer layers of the brain. At the outset the clinical picture may be similar to aseptic meningitis but evidence of neurologic dysfunction soon becomes manifest. The infecting organisms are often bacteria or fungi. The signs of marked meningeal irritation are well known, but the important consideration is the extent of brain involvement. Death or permanent sequelae may occur. Bacterial meningitis or purulent meningitis is the term most used when describing cerebritis.

Hemophilus influenzae and meningococci are organisms of high virulence which invade an otherwise normal host who lacks specific immunity. Although these organisms spread in the family setting and in a military population, they do not appear to spread through the hospital. This may be due to the high ratio of immunes to susceptibles—so-called herd immunity.[1] Pneumococci are somewhat less virulent; they attack a host who is less able to meet the challenge of infection. Higher incidence rates are seen in the very young and the very old. Pneumococcal infection can spread in a hospital under unusual circumstances. Tuberculosis and fungi also prefer a damaged host. Hypersensitivity is apt to be a very important factor in the pathogenesis of cerebritis with these organisms. Enteric bacilli, listeria, mimeae, Group A and B streptococci rarely invade the central nervous system of an individual over the age of two months. When such infections occur, markedly altered host defenses, parameningeal infection, or direct instillation of bacteria into the central nervous system should be suspected.

Dr. Paul Wehrle discussed the management of patients with bacterial infections of the central nervous system in whom the diagnosis has been proved by smear or culture. What about the patient in whom the source of infection is

not apparent and in whom viral, bacterial or fungal infections cannot be differentiated? Such a patient may have severe headache, fever, spinal fluid pleocytosis, but no major neurologic abnormalities or other organ dysfunction, and spinal fluid smears and cultures show no bacteria. Is the sugar decreased relative to the blood, and are spinal fluid protein and pressure elevated? If such abnormalities are present in the first lumbar puncture, are they present in repeated lumbar punctures over a day or two?

If a low spinal fluid sugar persists, the curable conditions are likely to be either tuberculosis or fungal infections. Although careful microscopic examination of the spinal fluid may indicate fungi on India ink preparations or tuberculosis in acid-fast smears, this will not be true in the majority of infections due to these microorganisms. If the chest x-ray indicates old tuberculosis, if there is a strong tuberculosis contact history, or if the PPD reaction is strongly positive, then the prime suspicion should be directed towards tuberculosis. Isoniazid 300 to 600 mg. per day; para-aminosalicylic acid 15 Gm. per day and streptomycin initially 1 Gm. per day should be administered. However, it must be appreciated that a therapeutic response will not take place immediately. Return of the spinal fluid sugars to normal values generally takes place between three weeks and three months after start of effective treatment in tuberculosis meningitis.[2] Thus therapeutic tests are of little immediate diagnostic value. Adrenal steroids may decrease the intercerebral edema and perhaps alter the basilar meningeal block, but they do not otherwise affect the course of the disease in the presence of appropriate antituberculous therapy. It is important to recognize that adrenal steroids can disseminate a fungal infection; their use when an etiologic diagnosis is not established requires a careful estimate of risks and gains. If there is some underlying systemic disease, particularly one in which there has been long-standing immunosuppressive or adrenal steroid therapy, the possibility of fungal meningitis should be considered when the spinal fluid sugar remains low. Cultures on Sabouraud's agar may ultimately yield the organism. Amphotericin in dosage of 1 mg./kg./day to a total dose of 4 Gm. should be used if a clinical diagnosis of cryptococcal or other fungal infection can be made. Serious hematologic and renal side effects do occur with amphotericin, so this treatment should not be started without an appreciation of the toxicity of the drug.

When focal signs of cerebral dysfunction are present, brain abscess is a strong possibility. Despite elevated cerebrospinal fluid pressures, papilledema is not a usual finding of uncomplicated pyogenic meningitis and the presence of this suggests study for abscess or other complications.[3] Localizing signs are not invariably present in patients with abscess at the outset. The correct diagnosis may be established with the help of arteriography, EEG, or brain scan. The usual spinal fluid findings of abscess are modestly elevated protein and pressure, pleocytosis up to 500 wbc/mm^3 (approximately half PMN's) and a relatively normal CSF-blood sugar ratio. After a leak from the abscess the sugar levels may decrease transiently. A persistently low CSF sugar in serial specimens is not suggestive of brain abscess, since this would imply continual spillage of the abscess into the meninges and is not consistent with life. Anaerobic cultures are important in the study of cause of brain abscess since bacteroides species or anaerobic streptococci are common infecting bacteria. Aggressive treatment is the key to cure. If frank abscess is present, surgery is indicated. There is no antibiotic that drains pus. Acute endocarditis, congenital heart disease, chronic mastoiditis, sinusitis and other bone infections, uterine or pulmonary infections are some of the sources of brain abscess and their presence should be carefully sought.

Encephalitis

Encephalitis is defined as diffuse inflammation and infection of the brain. The correct diagnosis of the various encephalitides clearly has important implications. For example, mumps encephalitis, although rare, is a severe disease with serious neurologic sequelae. By contrast, mumps meningitis is common and has no important sequelae. Here, rigid clinical as well as virological criteria are important. In patients with meningitis there are pleocytosis in the central nervous system, signs of meningeal irritation, and headache. In patients with encephalitis there are objective changes in personality and neurologic function, or alteration in the level of consciousness due to inflammation of the brain. A somewhat sedated or drowsy patient with aseptic meningitis does not meet the criteria for a diagnosis of encephalitis. Encephalitis syndromes following measles, rubella, varicella, other exanthematous infections or immunization

can be very destructive of brain function. In addition, rabies, *herpes simplex,* cat scratch virus, infectious mononucleosis, lymphogranuloma venereum, toxoplasmosis, amoebae (Naegleria species), falciparum malaria and trichinosis can all be etiologic agents. *Herpes simplex* is probably the commonest cause of sporadic cases of encephalitis, but can be difficult to document.[4,5] The therapy of central nervous system infection due to malaria, toxoplasmosis and trichinosis may be life-saving if the correct diagnosis can be made. Encephalitis due to rabies and to amoebae are thus far invariably fatal. Thus, the correct diagnosis has important implications in prognosis. Public health agencies should be alerted to prevent additional cases if possible.

While all of these forms of encephalitis may occur sporadically, large outbreaks of encephalitis due to these agents is not likely. However, among the arboviruses, epidemic encephalitis can be a major problem. We in Florida have a rich selection of arboviruses. Eastern, Western, and Venezuelan equine, California, and St. Louis encephalitis viruses are all present here and the state has experienced outbreaks of encephalitis in the past. The full extent of our problem is not yet known. Other arboviruses present in Florida include Gumbo Limbo, Tamiami, Shark River, Cowbone Ridge, Mahogany Hammock and still others whose potential for disease is unknown. The identification of even one case of arbovirus infection is vitally important to the community since a mosquito-borne outbreak may be averted if detected in time.

Precision in clinical as well as in laboratory diagnosis of central nervous system infections has important therapeutic, prognostic and epidemiologic implications for all of us.

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Questions and Answers

Central Nervous System Infections

QUESTION

Should prophylactic antibiotics be given to relatives and contacts of a child with meningitis? If so, which drug?

PAUL F. WEHRLE, M. D.

I am a hard-liner on this one. The only place that I would recommend using prophylactic antibiotics would be in the immediate household contacts of the individual who has a clinical episode of meningococcus disease. In this setting, there is a clear additional risk to the family or close associates. A family is sometimes difficult to define. My rule of thumb is that those who eat together regularly constitute a family. More casual patient-contacts from schools or distant relatives frequently get hysterical. Rumors that spread throughout the community are just fantastic.

Our observation of secondary cases of Hemophilus influenzae meningitis within families has been a bit disquieting. However, the overall risk of such an occurrence appears extremely low. It is greatest in the 1-3 year age group. Since we do not have a good prophylactic agent and since the rate is low, I think we might create more problems distributing antibiotics widely in this age group than we would otherwise have.

MORTON M. SWARTZ, M.D.

I agree completely. I think the greatest service that we, as physicians, can perform in regard to the family in this situation is to reassure them. Certainly, the problems from a practical point of view with secondary cases of H. influenzae or pneumococcal meningitis are so minor as to be not worth consideration. In terms of meningococcal disease, I think secondary cases are confined specifically to the family unit. In private schools one needs only to reassure the school personnel. In terms of what one does with the family unit that has been exposed to an index case of meningococcal disease, the answers are not all in. Some people have taken the stand that perhaps the best thing to do is to define this group and watch them very closely and treat them at the onset of symptoms that one ordinarily might disregard. Such minor symptoms could represent the initial phase of the disease. Another tack that has been taken in some areas has been to use sulfonamide prophylactics, assuming that perhaps 50% of the strains of meningococci are sensitive to this drug. Another tack is to use penicillin and perhaps by using very large doses, as Dr. Wehrle has suggested, avoid bacteriemia. This may turn out to be the most effective drug given in the family unit, at least for the immediate period. I think that most important, however, is to watch all family contacts very closely for a period of weeks.

N. JOEL EHRENKRANZ, M.D.

I can illustrate some of the difficulties with episodes that have happened to us recently. This year we admitted two adults from the same family to the Jackson Memorial Hospital Infectious Diseases Service. The first admission was a 16-year-old daughter who was known to have lupus erythematosis and came in with typical signs of vasculitis. She had recently decreased her steroid dosage and her headache was attributed to cerebral edema associated with this. The initial lumbar puncture was negative. Some 12-18 hours later, the mother of this patient came in with meningococcal meningitis. At this point, we re-examined the daughter, doing another lumbar puncture, and she also had evident meningococcal meningitis.

Our experience with sulfonamide prophylactics has not been invariably good, even where the organisms themselves have been sensitive. Some years ago, we administered sulfonamide prophylactics to the family contacts of a case of meningococcal infection and the organism was sensitive to sulfonamide. Some months later, one member of the family came in with what seemed to be

the same organism, and died with fulminating meningococcus infection. This patient had received sulfonamide prophylactics, we are sure. Of course we were never able to determine who may have spread the meningococcus to this person.

In summary, I think that where there is very close contact, such as a young child sleeping in the same room as the person with meningococcal meningitis and where there is a highly susceptible individual, for instance a child under the age of 15, then one should seriously consider hospitalizing a seemingly well person for observation, because meningococcal infection can be so fulminant that a delay in hours between the onset and effective treatment may be the difference between life and death. Antibiotic prophylaxis does not provide the protection that we would hope it would.

Dr. Wehrle

I think that Dr. Ehrenkranz has just touched on an extremely important point. I would like to emphasize that of the multiple cases that we see in families, there are co-primaries and true secondaries mixed together. Ninety percent of these have their onset within four days of the first case in the family. Ten percent are going to be admitted later. Now, none of the antibiotics that we have are going to remove the meningococci from the nasopharynx of these individuals. All we are doing is simply cushioning and suppressing the acute bacteremic stage. Our reason for doing this is that the meningococci is the only organism that can kill within about three hours from the onset of initial symptoms. Admittedly, relatively few patients go this way. Most of them have a more conventional course, but with the fulminant meningococcal toxemia we have absolutely nothing that will dependably arrest or slow the course of the illness. This is my reason for favoring antibiotic suppression.

Question

Is there antagonism of the action of penicillin by broad-spectrum antibiotics when both are used in the treatment of meningitis?

Dr. Swartz

Theoretical, experimental and clinical evidence suggests that such combinations are antagonistic in treatment of meningitis. Lepper and Dowling have shown that tetracycline and penicillin are antagonistic in patients with pneumococcal meningitis. Dr. Petersdorf has shown a similar antagonism of penicillin by chloramphenicol in experimental pneumococcal meningitis.

There are situations, however, in which one may have to employ a combination of drugs. An example is brain abcess, which may be due to a variety of microorganisms. In this setting it may be wise to use several drugs to provide broad-spectrum coverage, until results of cultures indicate that a single agent may be adequate.

editorial comment

W. Eugene Sanders Jr., M.D.

Detection, management and prevention of central nervous system infections remain difficult problems for the medical profession. As clinicians, our difficulties at the bedside are frequently compounded by the far-reaching implications of many central nervous system infections for the community at large. Our involvement with these broader problems in the community may at times seem personally undesirable or irrelevant, but it is nonetheless imperative. As indicated by Dr. Wehrle, a clinical diagnosis of pyogenic bacterial meningitis, regardless of specific etiology, is frequently equated to "epidemic spinal meningitis" by family, friends, and casual contacts of the patient. Our responsibility to allay resultant fears and prevent the occasional hysteria through education and reassurance is as great as our responsibility to diagnose accurately and treat appropriately. Furthermore, as Dr. Ehrenkranz suggests, for one to simply diagnose "viral meningitis or encephalitis," without an attempt to identify the specific etiologic agent, is a disservice to both patient and the community. Large reservoirs of arboviruses and a past history of epidemic disease in Florida dictate that we, as clinicians, assume primary responsibility for early case detection. We may do this only by regular submission of appropriate specimens for virus isolation and sero-

logic study, and by prompt case reporting to public health officials. Without our continuing participation, programs of epidemic disease surveillance are doomed to failure, and control measures instituted in the event of an epidemic may offer too little, too late.

In the preceding discussions, much attention was devoted to a consideration of the indications for and appropriate choice of prophylaxis in pyogenic bacterial meningitis. Each of the authors agreed that infections due to the meningococcus were the only possible indication for prophylaxis. There was also general agreement that prophylaxis should be reserved for those having prolonged and intimate contact with the patient. Examples of crowded living conditions in which secondary cases are likely to occur are military recruit training barracks, vessels at sea, certain unpartitioned dormitories, or homes in which three or more individuals sleep in the same bedroom. There can be little doubt of the former efficacy of sulfadiazine appropriately administered in prevention of secondary cases among contacts during their period of greatest risk (up to ten days following contact).[1] However, the former usefulness of sulfadiazine has been severely limited by the widespread emergence of resistant strains of meningococci. Other antimicrobial drugs such as tetracycline, erythromycin, penicillin G, ampicillin, and chloramphenicol—each possessing a high degree of activity against meningococcal growth in vitro and of efficacy in therapy of meningococcal disease—have failed to eradicate the carrier state or prevent acquisition of disease. Recently, cases of meningococcal meningitis have been observed to develop in patients while they were receiving penicillin orally or intramuscularly. Thus, the need for a uniformly effective prophylactic agent remains. Since the seminar in May, two possible solutions to this problem have been offered.

Rifampin, a new antimicrobial agent, has been demonstrated to be highly efficacious in eradication of meningococci from known carriers.[1] This drug, although still investigational, has been widely used in treatment of tuberculosis, wherein its efficacy and relative lack of toxicity have been substantiated. Rifampin has been active against all sulfadiazine susceptible and resistant meningococcal strains studied thus far. Mutant strains, resistant to rifampin, have been induced in the laboratory. However, emergence of resistant strains in man will likely not become a problem, if rifampin is reserved for cases at high risk and is administered judiciously. Penicillin G will remain the agent of choice in treatment of meningococcal meningitis and bacteriemia.

The second advance has been toward development of meningococcal vaccines.[2] Investigators at the Walter Reed Army Institute of Research have succeeded in extracting and purifying a polysaccharide component of several of the common serogroups of meningococci. These polysaccharides (from Groups A and C meningococci) appear nontoxic in man and their administration has been followed by a brisk antibody response. Limited early studies among susceptible military recruits suggest that immunization with the Group C polysaccharide may prevent acquisition of Group C meningococci in the nasopharynx. Thus, both the recognition of the activity of rifampin and the vaccine trials hold promise for future usefulness in the prevention of meningococcal infections.

There can be little doubt that dealing with infections of the central nervous system presents a tremendous challenge to the physician. As clinicians, we are seldom presented with similar opportunities to have a broad impact—on the patient, his family and his community—in a rapidly changing and exciting area of medicine.

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Exercise, Diet and Other Factors on Blood Lipids

Christian W. Zauner, Ph.D., and Edward W. Swenson, M.D.

The major blood lipids are cholesterol, triglycerides, and phospholipids. Their concentrations in blood vary among individuals and show diurnal and seasonal fluctuations. A number of other factors contribute to the concentration of lipids in the blood.

The ingestion of a fatty meal increases lipid concentration to the point that the plasma may become opaque. This condition is referred to as postprandial or alimentary lipemia.[1-5]

The purpose of this paper is to summarize the available scientific literature in order to elucidate the relationships between such factors as diet, exercise, age, sex, body composition, personality, heredity and physical status with blood lipid concentration and alimentary lipemia.

Dietary and Absorptive Aspects. When cholesterol is fed in an absorbable form, it shortly appears in the serum.[6] This exogenous form is conjugated to protein as it is absorbed from the small intestine, enters the blood via the thoracic duct lymph and travels in the blood stream as chylomicrons. On the other hand, cholesterol manufactured within the body (endogenous) is believed to be in the plasma in soluble form. Therefore, it is thought that changes in exogenous cholesterol may affect the chylomicron count and serum lactescence. Changes in endogenous cholesterol do not.

When Yemenite Jews changed to a rich Western diet, they gained weight and demonstrated elevated blood lipid concentrations.[7] Increased incidence of electrocardiographic abnormalities was also noted.

A dietary supplement of yoghurt was fed to hypercholesterolemic patients.[8] The yoghurt was low in fat content and cholesterol but had a heavy concentration of lactobacilli, bacteria thought to facilitate intestinal absorption. No change was noted in cholesterol levels.

Interference with intestinal absorption has been found to reduce blood lipid levels, both chronically and after meals. Lowered blood cholesterol levels were found after ileal exclusion.[9] Similarly, sprue interfered with fat absorption in Puerto Rican men thereby reducing serum cholesterol levels.[10] Also related may be certain antibiotics not only effective in altering intestinal flora but also in reducing cholesterol concentration.[11]

Exercise.—A single bout of rather intense isotonic exercise produces lipemia and hypercholesterolemia.[12-14]

There is little dispute that either pre-meal or post-meal exercise reduces the magnitude and duration of postprandial lipemia.[1,2,15-17] Since triglycerides are found in heavy concentration in the chylomicra and since postprandial lipemia is commonly estimated from measurement of serum lactescence, it may be logically assumed that the postprandial level of triglycerides might also be reduced by exercise. Mild exercise has been observed to be at least as effective as strenuous exercise in facilitating these phenomena.[17] The mechanism is probably humoral,[1,18] although some workers believe it is due to delay in intestinal absorption. Clearance of postprandial lipemia may be a function of epinephrine[18] and infusion of lactic acid reduces free fatty acid concentration.[19] Finally, plasma triglycerides decrease when depleted glucose stores are replenished.[20] All these factors may be related to clearance of alimentary lipemia after exercise.

Age.—Many studies indicate that concentrations of lipids in men increase with age.[21-29] Others disagree[30,31] and our own work has shown that elevated blood lipid levels are more closely related to habitual sedentary habits than to age.[32] This, we believe, is a sociological phenomenon. Western man characteristically becomes more sedentary with age and may even avoid activity.

Sex.—The human female may have little difficulty with elevated blood lipid concentrations until she reaches menopause, at which time her

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endocrine function becomes more like that of her male counterpart.[33-36] After menopause, women as a group may have even more problems with faulty fat metabolism than do men of similar age.[21] Many males, however, who have a tendency toward problems of this nature, die before reaching this age, thus leaving a relatively healthy male population for purposes of comparison.

Body Composition.—Mesomorphs typically have elevated cholesterol levels[37,38] especially when they grow older and gain weight.[39] However, elevated levels have been found in individuals of all body types when they become obese.[40-41] For example, cholesterol levels have been related significantly to obesity as estimated by the subscapular skinfold.[42,43] Studies in our laboratory revealed a significant negative relationship between percent of lean body mass and both fasting and postprandial lipemia.[44]

Personality Factors.—They appear to affect blood lipid concentrations.[41] Gregarious types have higher serum lipid lipoprotein levels than do less outgoing types.[41] A personality test predicts proneness to ischemic heart disease and elevated blood lipids.[45] The factor indicating such problems is "time awareness." The "stress of modern living" has been associated with an increase in blood lipids.[46,47] The stress of exercise does this also[12,14] as does traumatic shock.[48] The caffeine ingested in coffee has been shown to induce an increase in free fatty acids in the serum and this is probably a stresslike response.[49] The same workers could not produce an elevation of free fatty acids with decaffeinated coffee. Increased calcium ingestion has been reported to significantly decrease fasting serum cholesterol and triglycerides.[50] One is tempted to hypothesize that blood lipid levels could be balanced with *cafe au lait*.

Heredity.—Faulty lipid metabolism has been associated with some hereditary factors.[51] For example, diabetes is hereditary and often accompanied by abnormal blood lipid patterns.[52-58]

Lipids and Incidence of Disease.—The possibility that lipemia might be an important factor in the etiology of atherosclerosis was originally discussed more than two decades ago.[59] Cholesterol was first considered to be particularly dangerous, but later examinations suggest that elevated triglycerides represent the major villain,[60,61] being more closely correlated with ischemic heart disease and cerebrovascular disease. Lipemia has also been associated with shortened blood coagulation time,[27,62-65] inhibited fibrinolysis,[66,67] and reduced blood flow through the myocardium.[68]

Lipid Levels and Physical Performance.—The so-called oral fat tolerance test has been found useful in identifying individuals with faulty lipid metabolism.[3-5] A recent report describes a superior physical performer (H. S.) who showed an intense response to the oral fat tolerance test

Table 1. — Comparison of Blood Lipids and Physical Performance Variable, H.S. with Others

	Weeks of Training				
	0	2	4	6	8
Mean fasting serum cholesterol mg.%	246.7	238.5	232.1	231.2	273.4
Fasting serum cholesterol for H.S.	350.0	450.0	349.0	371.0	425.0
Mean fasting total lipids	742.8	741.6	708.9	730.0	822.7
Fasting total lipids for H.S.	1262.0	1080.0	1070.0	1130.0	1340.0
Mean postprandial serum optical density	0.834	0.568	0.558	0.643	0.524
Postprandial serum optical density for H.S.	1.699	1.222	0.521	0.800	1.496
Mean % treadmill slope at heart rate 160	9.1	13.9	16.9	17.3	16.8
% Treadmill slope for H.S. at heart rate 160	12.0	17.0	20.0	24.0	20.0
Mean heart rate at 5% treadmill slope	140.9	124.2	114.0	111.8	115.6
Heart rate at 5% treadmill slope for H.S.	125.0	109.0	110.0	105.0	109.0

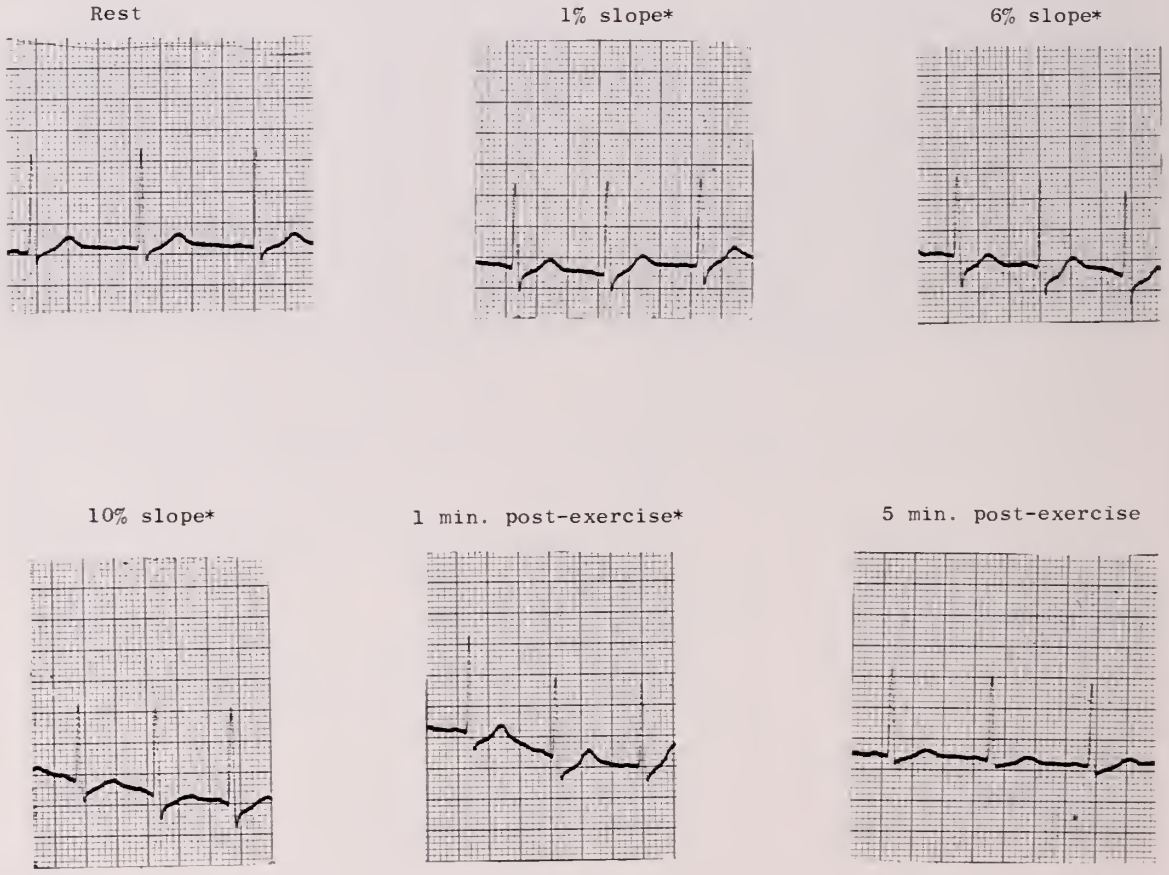
and abnormal lipid fractions despite a normal glucose tolerance test.[69] His data in comparison to the means of the data of other subjects reported in the same series[69] are reproduced in Table 1.

Habitually physically active subjects seem to have greater increases in blood fat levels as a result of a period of physical exercise than do sedentary subjects.[70] We have often noticed this phenomenon in our laboratory, and furthermore find it more pronounced in the mesomorph as opposed to other body types.

The reticuloendothelial system actively takes up fats from the blood.[71,72] It has been hypothesized that reticuloendothelial cells in the lung may be important in taking up blood lipids.[73] Since pulmonary blood flow is increased in exercise, it is conceivable that the lungs are partially responsible for the hastened clearance of alimentary lipemia seen as a result of physical activity.

Physical Status.—Although evidence to the contrary does exist[6,69,74] there is considerable scientific support for the hypothesis that good physical fitness and improvement in physical condition through training are accompanied by reduced blood lipid levels.[75-79] Triglycerides particularly seem to be sensitive to training.[77] Cholesterol levels have been observed to drop with training only when there is a concurrent weight loss.[77] Reduction in triglyceride levels through training is probably related to the fact that the triglyceride molecule can be converted to glycerol and fatty acids and then metabolized for energy release. Such is not true of the cholesterol molecule.[80] It is important to emphasize that the greatest reduction in both triglycerides and cholesterol concentration has been found in subjects with hyperlipemia initially.

Epidemiological studies reveal clearly that



* Significant S-T segment depression.

Fig. 1.—Resting and exercise ECG (treadmill - 3.5 mph). Transthoracic bipolar lead (5, 31, 68).

habitually active populations have lower mean blood lipid levels,[81,83] smaller response to dietary fat intake, [32,84-86] and reduced incidence of coronary heart disease.[84,85,87] Once these disease states are established, it is hoped, but by no means proved, that whole body physical conditioning can cause them to remit. A patient of ours has encouraged us into thinking with the optimists. Data relating to his condition follow:

> This patient was a 50-year-old sedentary professor who noted atypical angina (left mid-axillary line) under situations of intellectual-emotional fatigue but not exertion. His mother had suffered a fatal stroke at age 47. After complete cardiopulmonary evaluation, we placed him on a progressive physical conditioning program. The response of his exercise ECG and blood lipid levels are shown in Figures 1 through 4.

It is significant that although one would interpret this patient's ECG as improved, no important changes are evidenced in his lipid tolerance curve. Perhaps the underlying causes of ischemic heart disease cannot be altered through training, but such activity may precipitate remission of ECG abnormalities.

Summary

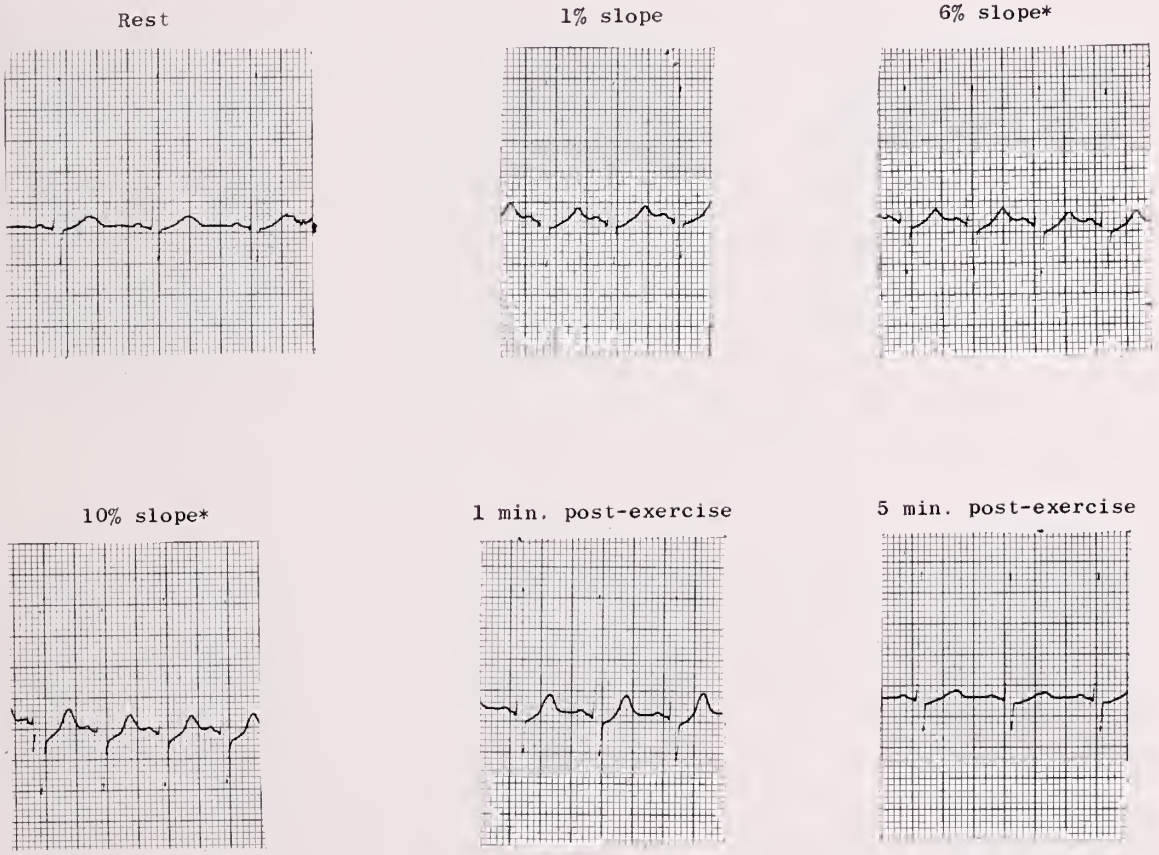
In summary, research generally supports the following concepts:

Physical training can reduce lipid levels, especially triglyceride concentration, if these levels are elevated initially.

Pre-meal or post-meal exercise reduces the magnitude and duration of postprandial lipemia.

Acquired obesity increases both triglyceride and cholesterol concentration.

Weight loss precipitates a drop in fasting serum cholesterol. This may be the mechanism underlying the effectiveness of training as a reducer of lipid concentration.



* Significant S-T segment depression

Fig. 2.—Resting and exercise ECG (treadmill - 3.5 mph). Transthoracic bipolar lead (7/17/68).

The method of choice for reducing chances of heart and/or artery disease appears to be graded progressive training and gross reduction of dietary saturated fats. This will aid in keeping the body weight stabilized and lipid concentrations constant. According to De Haen,[88] the use of hypocholesterolemic drugs presently is not entirely safe.

Future Research

Some questions to which we hope to address our future research:

Is the triglyceride concentration lower in habitually active people?

How dangerous are the post-meal nap and the midnight snack?

Does an increase of percent lean body mass with weight held constant affect blood lipid levels?

Can an individual's response to the oral fat tolerance test be altered?

How does the athlete handle dietary fats, and how efficient is he at mobilizing and clearing fats?

What part does the lung play in fat metabolism? Is it in fact a metabolic organ?

References are available from the author upon request.

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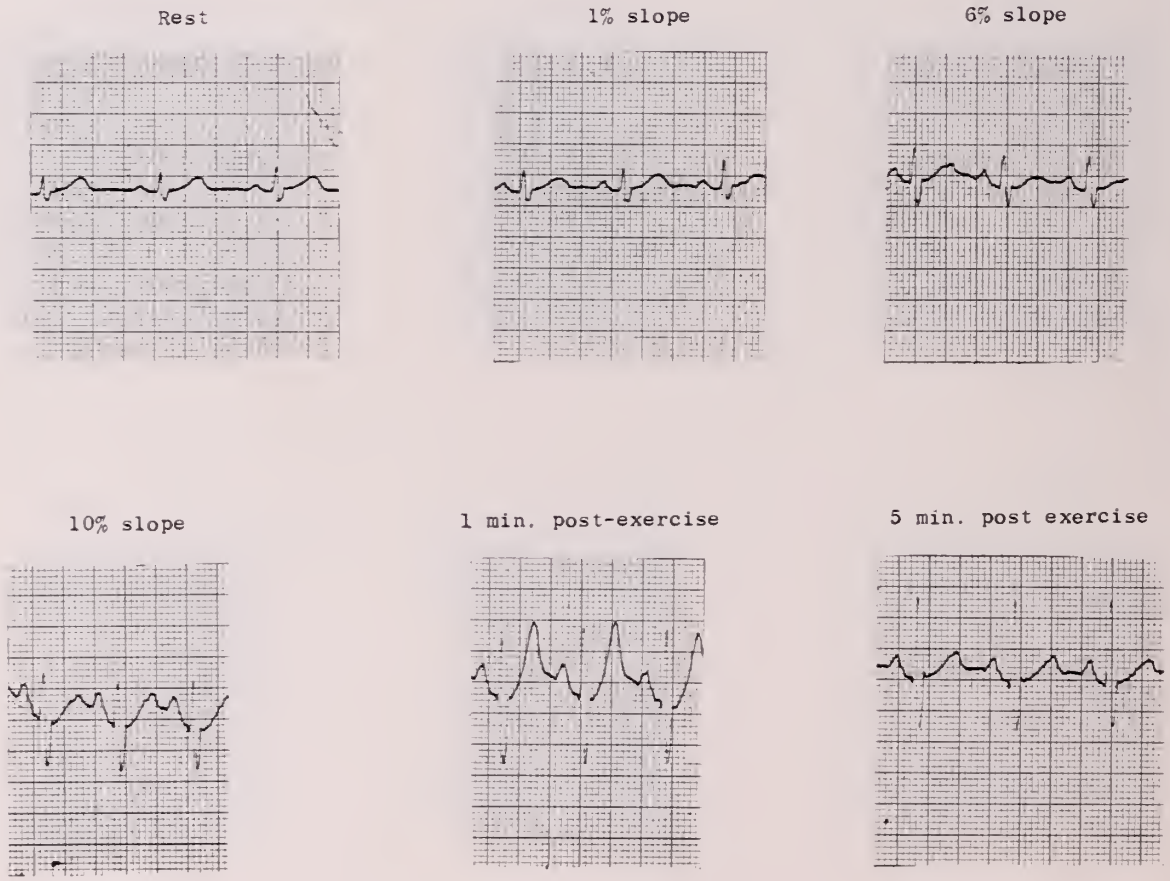
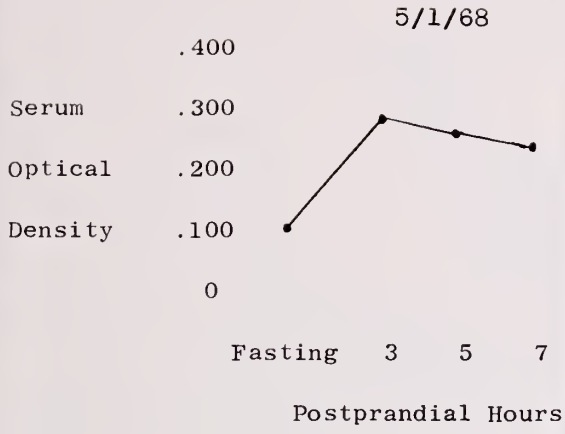
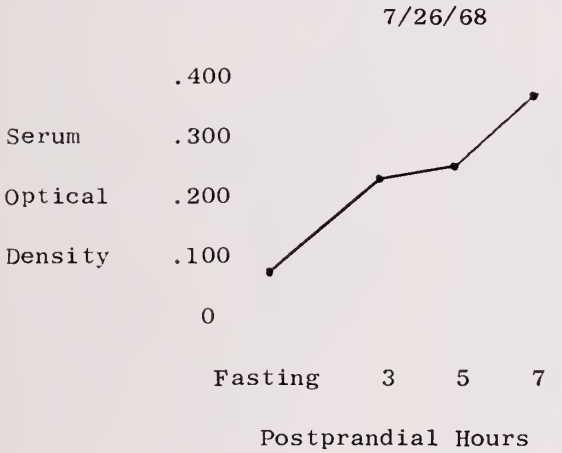


Fig. 3.—Resting and exercise ECG (treadmill - 3.5 mph). Inferior-superior sternal lead, telemetered (1/31/69).





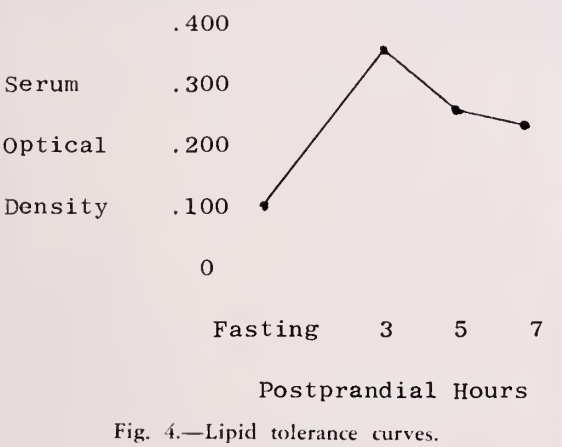


Fig. 4.—Lipid tolerance curves.



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Indication—Oral contraceptian.

Contraindications—Thrombaphlebitis, thrambaembalic disarders, cerebral apoplexy ar a past history af these canditians, markedly impaired liver functian, knawn ar suspected carcinama af the breast, knawn ar suspected estragen-dependent neaplasia, undiagnased abnarmal genital bleeding.

Warnings—Watch far the earliest manifestatians af thrambatic disorders (thrambaphlebitis, cerebrovascular disorders, pulmanary embalism, retinal thrambasis); if present ar suspected discantinue the drug immediately.

British studies reparted in April 1968[1,2] estimate there is a seven- to tenfald increase in martality and marbidity due ta thrambaembalic diseases in wamen taking aral cantraceptives. In these cantralled retraspective studies, invalving 36 reparted deaths and 58 haspitalizations due ta "idiopathic" thrambaembalism, statistical evaluatian indicated that the differences abserved between users and nan-users were highly significant. The canclusians reached in the studies are summarized in the table belaw:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

Na camparable studies are yet available in the United States. The British data, especially as they indicate the magnitude af the increased risk ta the individual patient, cannot be applied directly ta wamen in other cauntries in which the incidences af spantaneausly accurring thramboembalic disease may differ.

Discantinue medication pending examinatian if there is sudden partial ar camplete lass af visian, ar sudden onset af praptosis, diplapia ar migraine. Withdraw medicatian if papilledema ar retinal vascular lesians are faund.

Since the safety af Ovulen in pregnancy has not been demanstrated, it is recommended that pregnancy be ruled aut far any patient who has missed twa consecutive periads before continuing the contraceptive regimen. If the patient has nat adhered ta the prescribed schedule the passibility of pregnancy shauld be considered at the first missed periad.

A small fractian af the hormone agents in aral contraceptives has been identified in the milk af mothers receiving these drugs. The lang-range effect on the nursing infant cannat be determined at this time.

Precautions—Pretreatment physical examinatian shauld include special reference ta the breasts and pelvic organs, and a Papanicalaou smear.

Endacrine and passibly liver function tests may be affected by Ovulen. Therefare, it is recammended that such tests if abnarmal be repeated after the drug has been withdrawn far twa manths.

Pre-existing uterine fibramyamas may increase in size under the influence af pragestagen-estragen preparatians.

Because these agents may cause same degree of fluid retention, canditians which might be influenced by this factar, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful abservatian.

In breakthrough bleeding, and all irregular vaginal bleeding, cansider nonfunctianal causes. Adequate diagnostic measures are indicated in undiagnased vaginal bleeding.

Carefully abserve patients with a histary af psychic depressian and discantinue the drug if severe depressian recurs.

Any possible influence af prolanged Ovulen therapy an pituitary, avarian, adrenal, hepatic ar uterine functian awaits further study.

A decrease in glucase talerance has accurred in a significant percentage af patients an aral cantraceptives. The mechanism af this decrease is abscure. Far this reasan, diabetic patients shauld be abserved carefully while receiving Ovulen.

Because af the effects af estrogens an epiphyseal clasure Ovulen shauld be used judiciausly in yaung patients in whom bane growth is nat camplete.

The age af the patient canstitutes na absalute limiting factar, although Ovulen therapy may mask the anset of the climacteric.

The pathalagist shauld be infarmed af Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant associatian has been shawn between use af aral cantraceptives and the fallowing seriaus adverse reactians: thrambaphlebitis, pulmonary embolism.

Although available evidence is suggestive af an assaciation, such a relatianship has been neither confirmed nar refuted far the fallawing serious adverse reactians: cerebravascular accidents, neuro-acular lesians, e.g., retinal thrombasis and aptic neuritis.

The fallawing adverse reactians are knawn to occur in patients receiving aral cantraceptives: nausea, vamiting, gastrointestinal symptams (such as abdaminal cramps and blaating), breakthrough bleeding, spatting, change in menstrual flaw, amenarrhea during and after treatment, edema, chlaasma ar melasma, breast changes (tenderness, enlargement, secretian), change in weight, changes in cervical erasian and cervical secretians, suppressian af lactatian when given immediately past partum, chalestatic jaundice, migraine, allergic rash, rise in blaad pressure in susceptible individuals, mental depression.

Although the fallawing adverse reactians have been reparted in users af oral cantraceptives, an assaciatian has been neither canfirmed nar refuted: anavulatian past treatment, premenstrual-like syndrame, changes in libida, changes in appetite, cystitis-like syndrame, headache, nervausness, dizziness, fatigue, backache, hirsutism, lass af scalp hair, erythema multifarme and nadasum, hemarrhagic eruptian, itching. The fallawing labaratory results may be altered by aral contraceptives: hepatic functian: increased sulfabramaphthalein and ather tests; caagulatian tests: increase in prothrombin, Factars VII, VIII, IX and X; thyraid functian: increase in PBI and butanal extractable pratein baund iadine, and decrease in T^3 uptake values; metyrapone test; pregnanedial determinatian.



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H. M. Pollard, M.D., Ann Arbor, Mich.
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Walter Lane, M.D., Tampa, Fla.
General Practice
Henry Clay Frick, II, M.D., New York, N. Y.
Gynecology
William H. Crosby, M.D., Boston, Mass.
Internal Medicine
Thomas L. Petty, M.D., Denver, Colo.
Internal Medicine
David N. Danforth, M.D., Chicago, Ill.
Obstetrics
Jack A. Dillahunt, M.D., Albuquerque, N. M.
Ophthalmology
John J. Niebauer, M.D., San Francisco, Calif.
Orthopedic Surgery
William K. Wright, M.D., Houston, Tex.
Otolaryngology
Omer E. Hagebusch, M.D., St. Louis, Mo.
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Chester M. Edelmann, Jr., M.D. Bronx, N. Y.
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Florida Medical editorial

From the Editor

Franz Stewart

Protect Each To Serve All

Free your imagination or your memory and see a hospital some 25 years ago. This is a good hospital and on the wards are many sick people who, at least during their sickness, are wards of the county. Those who come through certain doors or are tagged with certain diagnoses are cared for on the medical floors.

It is important to the patient and for intern training to have a system whereby experts in the several subspecialties can exert their knowledge in depth to improve training and patient care. An orderly system exists. On Monday the physicians from the general medical service make rounds and supervise management. On Tuesday the gastroenterologists make rounds. Then on Wednesday the cardiologists are in charge. Thursday the diabetes and metabolism service make rounds. Friday the rotation begins again. The nephrologists, rheumatologists, infectious disease or medical chest services were not present to take a turn.

With this organized system, the patient has direction to his medical care only if the intern can successfully hide him from rounding on some days or even on all days. Care depends upon the skill and agility of the intern.

On other floors are people who chose their own physician and are not wards of the county. This permits a personal relationship between physician and patient but offers little chance for the intern to gain stimulus or information. The quality of care is an individual matter and there is almost no supervision or internal quality control. The result is good care for some and inadequate care for others.

Now rein in your imagination and let memory escape all the intervening years and improvements. Notice the methods of internal quality control which have developed by group effort.

Economic aid, especially government financing, has taken many of the patients from the category of county wards and, potentially at least, they can choose hospital or physician on the open market. This hopefully gives them the advantage and dignity of individualized care.

The problems are the same. There are wards of the county and these sick people must have skilled medical care and the dignity and personalized attention needed to recover. There are others who should have a choice of physician either because they can buy this themselves, or because government or other means supplies this dignity of choice to them. The physicians must impose quality control on medical management. Good medical training of interns is necessary and this requires exposure to the guidance of personalized broad medical care with an opportunity to watch the interplay of the various subspecialties. At the same time the intern must have a chance to try himself out, to exercise independent judgment and action.

These problems seem to conflict but this is because each person involved sees each problem only from his own vantage point. This will always be true in some degree, but when there is leadership to consider the needs of patient care, intern training, and the needs of each physician regardless of his status other than medical ability and contribution, then a team effort will answer the problems. This does work and the quality of care and quality of training improve each other.

Now walk the floors of this same hospital and see the search for a simple answer still going on. It is logical to make all teaching patients ward patients, without regard to whether or not they are wards of the county. Have the intern in charge take the lead under guidance of an appointed physician who makes rounds but also have in charge the physician who was chosen by the patient. If the intern avoids communication and can balance the doctors quietly and skillfully, then the patient will get medical direction according to the skill and agility of the intern. On the other hand with cooperation between the intern, teaching team, and the responsible physician, the plan can surely work. What a charge this is to the leaders to keep the communications open, to protect the interests of all, and avoid the pitfalls presented by income from the government. Physicians tend to be individualists regardless of the direction of their labors. The view from each vantage point can focus in the same direction, but this requires the humility and confidence to be certain the advantage to all will be served best by the protection and stimulus to each one.

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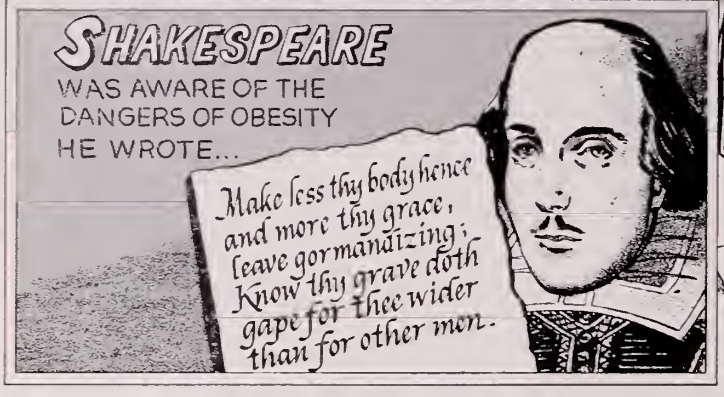
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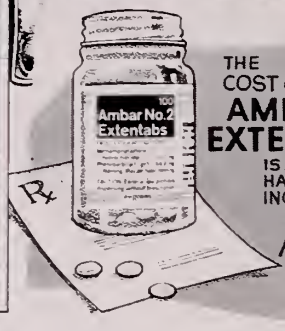
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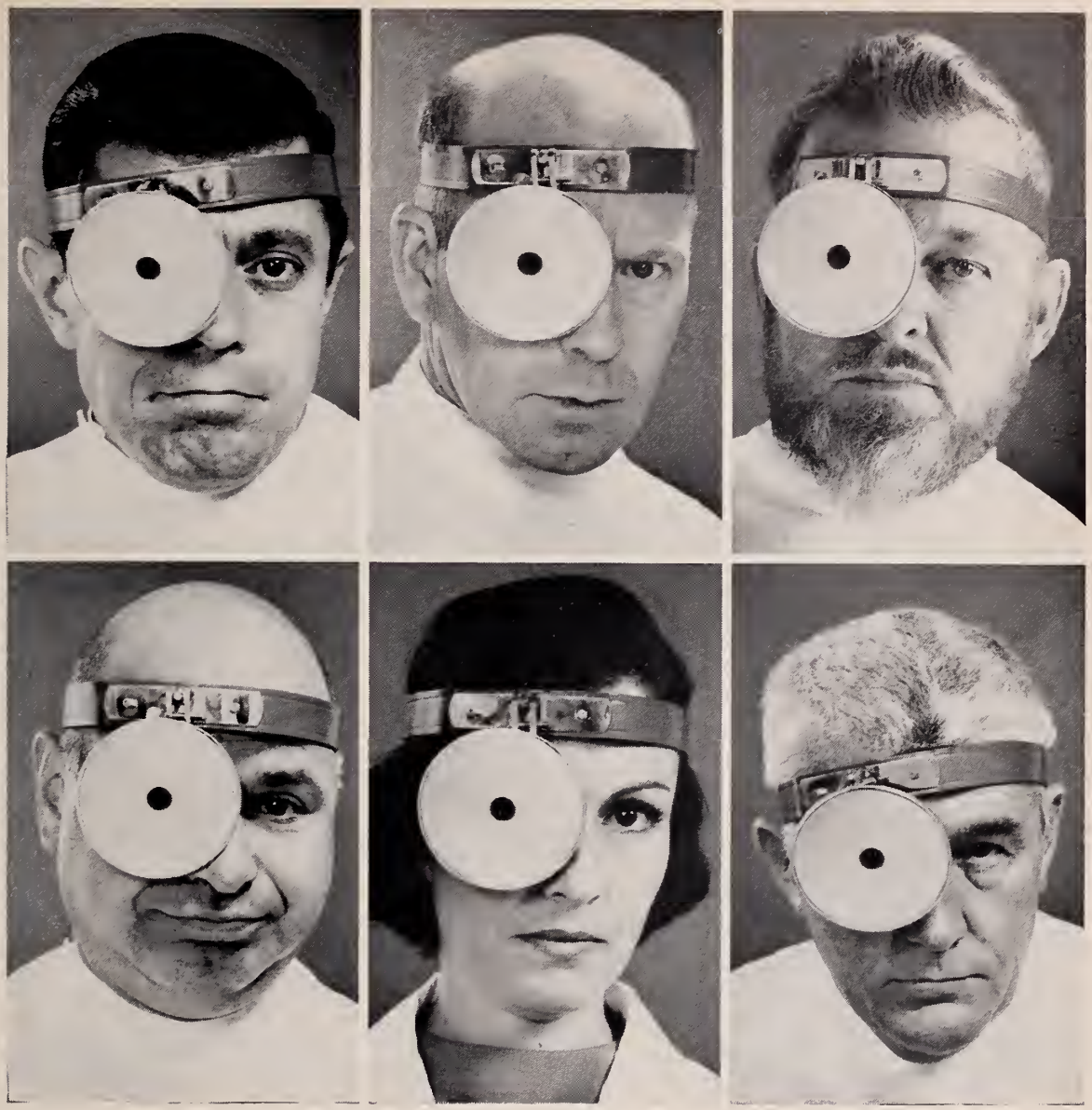
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16	3.50	4.40
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*Reports on file: Medical Research Department, Mead Johnson Laboratories, Evansville, Indiana 47721

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1970 Benefit Art Show

Marion S. Gilliland
(Mrs. C. H.)

May I put in a word about the AMA-ERF Benefit Art Show which is fast becoming a traditional part of our Florida Medical Association convention each year?

Plans are underway for another expanded display of the many and varied artistic talents of the medical community. Each year since the beginning in 1967, the show has grown in number and variety of entries submitted by Florida physicians and their wives. Last year 16 award winners were selected from 79 entries by 34 artists and $410 was contributed to AMA-ERF.

This year we will have two new categories; both should provide additional entries and interest. For the first time the show is being opened to sons and daughters of Florida physicians. With their bright young imaginations and creative talents added, there should be new levels of artistic expression to explore and enjoy at the May 1970 show at the Diplomat Hotel.

Also, a new award has been added in a special category—the Editor's Award. Dr. Franz Stewart, editor of the Journal, is contributing an award for the most artistic and appropriate entry suitable for use as a cover on a future issue of the Journal. You are all aware, I am sure, of the beautiful, subtle and completely Florida nature of the covers of the Journal. They represent our natural heritage as citizens of Florida and our hope for the future—as a state, as a people, and as a profession dedicated to serving those people. Florida medicine as practiced today is an integral part of life in our state and it will be a part of the heritage of future Floridians. Surrounded by natural beauties and enjoying a full life afforded us all, personally and professionally, what a wealth of material for inspiration to artistic expression.

We are encouraging artistic endeavor of all kinds. There have been inquiries about entering poetry and specialized crafts. If there are sufficient literary entries to establish a separate category, we will plan to do so. If there are enough entries in the specialized crafts to warrant it, we will establish a separate category for them also.

The Art Show is but a toddler, your toddler, and a vigorous and fast-growing one we hope. We want it to mirror your interests and talents; to give you pleasure, sharing your talent with others and enjoying their talents in return and incidentally, in a measurable and meaningful way, to lend support to the things for which the American Medical Association Education and Research Foundation was established and which it supports. Your entries in and support of the AMA-ERF Art Show at the FMA convention helps to maintain your practice of medicine and create the knowledge and skills produced by biomedical research as well as provide for the education of your future associates and successors.

Plan now to enter. An entry blank will be provided in a future issue of the Journal.

▶ Mrs. Gilliland, 324 Northwest 24th Street, Gainesville 32601.

Mrs. Gilliland is president, Woman's Auxiliary to the Florida Medical Association.

Embryonic Blood Flow Patterns and Heart Development

Some Remarks on B. L. Guedes' "Studies of Circulation in the Embryonic Chick Heart"

Tomas Pexieder, M. D.

In his paper published in this Journal, May 1968, B. Guedes reached the conclusion that "Separation of streams (understand spiral) does occur in the developing chick heart with virtually no mixing of blood during its passage . . . . although this study is not conclusive, it is suggested that disturbance of blood flow patterns is a likely cause of these (understand cardiovascular) anomalies." This study was supported by six references, three of them papers written by Jaffee.

Let us look to this communication a little in detail. It is an old tradition in writing scientific papers that results obtained by other authors up to date are mentioned. In case we are doing the same or using the same methods as others, it is useful to mention the difference in our approach and results. Finally, it is only very rarely that we present nonconclusive results, the conclusions with some statistical weight being appreciated.

The influence of blood flow on heart development was deduced first by Beneke in 1920 and not by Bremer in 1932, as stated by Mr. Guedes. Authors such as Goerttler, Jaffee, Moffat, Patten, Kramer and Barry, omitted by Mr. Guedes with the exception of some papers by Jaffee, could not follow the separate course of any labelled laminar blood stream from the heart. And so, as in the case of Mr. Guede's study, they could not appreciate the morphogenetic significance of blood stream concretely and quantitatively.

The 15-year long-lasting systematic study of Czech scientists, Rychter and Rychter and Lemez, brought many evidences and proofs, more than conclusions, of the influence of the blood streams on cardiac morphogenesis in chick embryos. Rychter and Lemez proved that small deviations of the blood stream retarding development of proximal bulbar cushions and/or atrioventricular cushions results in ventricular septal defects. In 1962 Rychter in his review article stated that the morphogenetic movement of the heart bulb is also governed by the blood stream, reaching it from the left ventricle. Mr. Guedes cited nothing from these results.

The methods used by Mr. Guedes can be classified as local intervention which, according to Rychter, is the best way for the analysis of the deviations of developmental processes into abnormal channels. Concerning local intervention on the area vasculosa, it was Wolff and Stephan who have done many experiments with electrocautery, electrocoagulation and a small mechanical occluding device. But all these interventions, much more minute than Guedes' intervention, were too unspecific, wasteful and with diffuse action. In 1956, Rychter and Lemez presented their microclips for exactly directed and limited local intervention. Also here no quotations by Mr. Guedes.

Concerning dye injection, it was used by Moffat to study the morphogenesis of aortic arches in rat embryos. Rychter, Lemez and Siler analyzed, by means of dye injections, the hereditary ventricular septal defects occurring in the S-line of brown leghorn chicks, and in 1961 Rychter and Lemez by the same method followed the hemodynamic effects of the suppression of both pulmonary arches. But none again is cited by Mr. Guedes.

Summarizing we can say that 36 years after Bremer, Mr. Guedes has repeated the same experience with almost the same inconclusive results, while at least six years ago there was proof and evidence enough for the fact that embryonic flow patterns, and not only two spiral streams, play a decisive and sharply limited role in the development of the heart. Recent experiences bring some further explanation in the way of action of these patterns.

Is the lack of references in Mr. Guedes' work a consequence of the information explosion, negligence or disrespect to the work done by others?

From the Institute of Embryology, Charles University, Prague, Czechoslovakia, and Institute of Histology and Embryology, University of Lausanne, Lausanne, Switzerland.

▸ Dr. Pexieder, Universite de Lausanne, 9 Rue du Bugnon, CH-1005, Lausanne, Switzerland.

American College of Emergency Physicians

William T. Haeck, M. D.

In the past ten years approximately 200 articles have appeared detailing "The Emergency Department Problem." It is of interest that the majority appeared in "hospital" literature and very little in "medical journals." It is obvious that the hospitals were stimulating the development of solutions to the problems and only lately have physicians become the primary movers in attempts to solve emergency department problems.

In January 1968, a conference was sponsored by the AMA in San Francisco. The title was "The Community and Emergency Medical Services." The conference in three days hardly concerned itself with delivery of health care in the hospital itself. It was primarily devoted to ambulance service.

About half the people attending the conference were physicians who were devoted to full time emergency medicine. We soon discovered the conference was not really geared to present what we had hoped to hear: "How can physicians best organize to give maximum care in our emergency department?" Soon, outside the regular schedule, small groups of emergency department physicians were meeting fellow emergency department physicians and discussing common problems. It was readily apparent that common problems and their solutions needed a physicians' forum for their expression.

A group of physicians from Michigan with common local problems took up the task of organizing emergency physicians as an entity. After long (often weekly) conferences, the American College of Emergency Physicians was incorporated in September 1968. The purposes and functions of the college as stated therein are:

To advance the ethical standards of the private practice of emergency medicine and surgery.

To encourage and implement the training and continuing education of emergency physicians.

To improve emergency services rendered to the patient.

To promote patient education emphasizing the ethical standards and principles of private practice.

To preserve the right of the emergency physician to engage in medical and surgical procedures for which he is qualified by training and experience.

To study and to analyze the socioeconomic aspects of the private practice of emergency medicine and surgery.

To promote policy which preserves the integrity of private practice.

To promote coordination of community emergency care facilities and personnel.

In November 1968, at a conference held in Washington, D. C., interested parties from all over the United States met to consider the problem of promoting membership in the college; skeleton committees were developed. In February 1969, an organizational meeting was held in Chicago to further refine committee work and to report our membership progress.

An immediate organizational goal is the establishment of state and regional charters, so delegates may be sent to a national convention where formal ratification and refinement of a constitution and bylaws can be accomplished.

The biggest needs of the college at present are more time and more members.

The board meets every two weeks in Lansing, Michigan. As of this writing, no full-time director or secretary has been hired because of scarce finances. Most correspondence is initiated by the individual physician. Solutions to organizational matters within the board and within the committees are immediate goals.

The most personal satisfaction I have received as a member of the college is the opportunity to meet many fine men from all over Florida and the United States who are practicing emergency medicine. We have had many discussions in reference to common problems and have helped each other by seeing the different solutions others have developed.

Much remains to be done. We would encourage all Florida physicians practicing emergency medicine to join us in our efforts to upgrade practice in a fledgling specialty.

▶ Dr. Haeck, 10 University Boulevard North, Jacksonville 32211.

Dr. Haeck is membership chairman, American College of Emergency Physicians.

Dialogue

Spontaneous comment by readers is invited. Choice of subject and manner of treatment is an individual matter for each contribution. The ideas, opinions or statements are those of the individual who is writing and are not meant to reflect the attitude of the Florida Medical Association, its officers or its publication. Each one is invited to express himself on a subject close to him. Acceptance of material will be based on space, appropriateness and good taste according to our best judgment.—Ed.

Legal Considerations in Removal of Eyes

Nicholas H. Kalvin, M. D.

Dear Editor:

Some of our hospital personnel have brought up a legal point of consideration in the removal of eyes willed to the eye bank from individuals who die outside the hospital. For example, if a person should die either in a rest home or at his own domicile or on the street and he is found to carry or is known to carry a card requesting that his eyes be donated to the eye bank, it has been my experience as a resident, and in my practice so far in our community, to have the individual brought to the hospital emergency room. Here we check the card to see that it is a bona fide donation card and that it has been duly witnessed. We then remove the eyes using sterile instruments from a tray that has been previously set up, put the eyes in sterilized bottles and forward them to the eye bank in Miami by highway patrol, if they are not to be used locally.

The hospital pathologist thinks that this is rather risky legally. He feels that even though the person has expressed a desire to donate his eyes, removal of the eyes in the emergency room constitutes an operation upon a corpse without consent of the next of kin—that may be construed therefore as an unnecessary and perhaps indefensible legal risk. He feels that the person performing the operation is legally at risk as well as the hospital that furnishes its facilities and equipment for such a procedure.

He also feels that the hospital is placed in a bad way financially since it would be most unfavorable publicity for the hospital to bill the deceased or his family for the use of the surgical trays, antibiotic used or sterilization of the eye bank bottles. Since the hospitals are increasingly under attack by the federal government, he feels it would be wise if the cost for this otherwise unrecognized and unrewarded service be borne by outside organizations, such as the Lions Club or the eye bank itself or private contributions. Needless to say, I do not charge for the removal of the eyes myself, although it may cause considerable inconvenience or disruption of my own schedule and activities.

I have to agree with our pathologist's thinking although I will continue to do as I have in the past. It is truly regrettable when we are forced, first of all, to think not what may be desirable or honest or worthwhile or right or curative, but rather what is the least legal risk we can assume. I personally think that such an approach to life will become increasingly a problem until contingency fees are eliminated.

The pathologist speaks from experience since he has known of cases where suit was begun or threatened, even where local authorities had warranted autopsies on deceased parties.

▶ Dr. Kalvin, 773 Fourth Avenue North, Naples 33940.

Does recent legislation help give the answer?—Ed.

The Old Order Changeth

Matthew E. Morrow Jr., M.D.

The need for the prompt delivery of *good* medical care to our patients has been repeated so often that it has become a cliche. We have talked about freeing the M.D. from minor duties that could well be taken care of by less skilled, but nevertheless trained, personnel so much that it has become quite a bore. The constant problem of insuring continuing education for the physician has received a vast amount of attention in the past decade and continues to continue.

With each passing day all these problems become increasingly important, and unfortunately, increasingly difficult. As the population swells, the medical profession, destined to give such care, continues to shrink. As the minor duties are taken over by para-medical personnel, the paper work increases. And finally, as knowledge mounts, the time for the practitioner to learn diminishes.

We are now, as never before, examining the total health care of this nation, and the realization that we can best meet its needs through cooperative practice in a clinic or hospital is evident. The highly esteemed doctor in solo practice is hard on the tracks of the now all-but-extinct horse and buggy doctor. The recognized merit of the doctor-patient relationship is by necessity giving way to the new technology in order that medical knowledge can better encompass the growing demands of the public.

Locally, our hospitals are recognizing their responsibility to the community by building campaigns of a proportion never before experienced. The trend in all this is obviously toward predominately outpatient care, and the future practice of medicine seems, as I have mentioned, destined to be largely hospital or clinic based. This, if done well, can help solve each of the three major problems referred to previously.

The most appealing solution to the third problem—that of continuing education for the physician—is in dropping the established teaching and non-teaching hospital appellation as all medical centers would be in the business of continuing education and each would have a Director of Continuing Education (DOCE) whether or not they had need for a Director of Medical Education (DME). This hopefully would prove more successful than our present seminars and out-of-town scientific meetings for it would, as has been pointed out, "bring the hay to the horses."

The emergency room is perhaps the advanced guard of this whole movement which is growing in strength and recognition whether we happen to like it or not. The success of the emergency room in attracting and keeping competent physicians will no doubt greatly influence acceptance or rejection of the concept of hospital-based physicians for their diagnostic clinics and follow-up treatment centers.

"There's a real push now for making the hospital's emergency service a full-fledged department to give it more status and to ensure that it gets more support from the hospital administration," says Dr. John Paul Stapp, chief medical scientist of the National Safety Bureau. He sees the old emergency room with its unseasoned intern as a thing of the past and in its place is emerging the most significant liaison between the hospital and the community. "In order that it not falter, it must be under the constant supervision of a physician whose best interest is for the patient and the patient's private doctor as well as the hospital."

The emergency room can also become the heart-beat of the hospital in training personnel and in continuing education. So we are back to our stated problems, hopefully with some solutions. The emergency room should be the constant supplier of prompt and good care to the patient (now nauseatingly referred to as the consumer), it should be able to delegate its duties and organize its personnel so that the physician's time is not consumed by unimportant details, and it *can* be the home office for a program in continuing education for the practicing physician.

Despite what I have written here, let it be thoroughly understood that I fully endorse the editorial written by Dr. Clyde Collins that appeared in the November issue of the Journal under the title "The Individual Practitioner." One of my favorite true stories is about a friend of mine who flees the Kaiserian Clinics of California when she is in need of a "real" doctor to fly to London to see a good general practitioner who is still in private practice.

▶ Dr. Morrow, 107 River Road, Orange Park 32073.

Our Mail

Dear Editor:

At first I would like to introduce myself. I am a Mexican missionary (Catholic) who has been working in Korea for five years and I have volunteered to stay for one more year.

Along with my missionary job, I am working in social welfare for the Korean people. I was for a year in the National Leprosarium of Korea and now I am working in a very poor territory in which I am the only foreigner, and a lot of people come to me asking for help.

Through a close friend in the U. S. Army I heard and got your name and address. I would like to ask how to get any kind of medicines to give free to this people, and also if possible how to get books and magazines, even old ones, for the students and nurses. Here in Korea medicine is studied in English; that is why we need a lot of printed material.

As a member of the medical association in your state, probably you are the most qualified person to help me. Is there some institution which may provide some medicines? Would there be an institution or a person who would be interested in sending me books and medical supplies? If so, I would like to have their names and addresses in order to apply for help. Later I may give them the address to send the stuff in order to avoid the problems in the custom house.

Excuse my poor English but I can say that after five years in Korea I can speak Korean better than English.

Father Stephen Ortega
Catholic Church
Bo Seong Kun. Bo Seong Eup.
Chol La Nam Do.
Korea

Dear Editor:

I have read, reread and read again your editorial on "Death, A Concept to Reconsider." Each reading brings new insight and new meaning. The depth and breadth of the thoughts expressed are difficult to comprehend unless one thoroughly and repeatedly contemplates each paragraph; you have indeed in one page succinctly and in a meaningful way translated many of the thoughts of philosophers concerning death, and life, down through the centuries. I am especially interested in the thoughts you expressed about physicians, whose experiences and responsibilities should evoke nothing less than absolute humility.

One must have lived many experiences and be sensitive to and have reflected on a broad expanse of knowledge to record such a sage message about such a complex subject. I congratulate you.

Fred Wasserman, M.D.
Coral Gables

Dear Editor:

The current issue of Reader's Digest contains a gross error. I feel that the Florida Medical Association should protest. "Profiteers Are Wrecking Medicaid" on page 151 lists as an example of a Medicaid profiteer a Florida physician. If Florida has no Medicaid, how can a Florida physician be a profiteer in the system?

William T. Haeck, M.D.
Jacksonville

Mr. Hobart Lewis
President and Editor-in-Chief
Reader's Digest

Dear Mr. Lewis:

We have reviewed the article in the October 1969 issue of the Reader's Digest entitled "Profiteers Are Wrecking Medicaid." On page 152, it states that a Florida physician offered kickbacks to patients if they would cooperate in their being

listed on false claims for services he had not performed, and in one instance he claimed 21 house calls or office visits for a patient who was in Greece at the time.

I would greatly appreciate the source of information on which this statement is based, as it reflects upon the physicians of Florida. It would be impossible for there to be any abuse of Medicaid in Florida, as such a program has never existed in this state and has just recently been authorized by our Florida legislature to become effective January 1, 1970.

Legitimate criticism should not be objected to by anyone, but when authors make slanderous unfounded statements, they should certainly be held responsible.

Thank you for consideration of this request.

W. Dean Steward, M.D.
Public Relations Officer
Florida Medical Association
Orlando

Dear Doctor Steward:

We deeply regret that it was necessary for you to point out that, because Florida has no Medicaid program, the illustration concerning a Florida physician had no place in "Profiteers Are Wrecking Medicaid." The error stems from the fact that one of our researchers found the example in a Washington Post Report (June 15, 1969) on the Senate Finance Committee's investigation of both Medicare and Medicaid, and there, unfortunately, it was cited as an abuse of Medicaid. A further check should have been made.

Thank you for giving us an opportunity to explain.

Hobart Lewis
Pleasantville, N. Y.

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What the Regional Medical Program Can Do for Individual Physicians

H. Phillip Hampton, M.D.
Chairman, Florida Advisory Council, Inc.

Dear Dr. Hampton:

I just received the nice letter from you and Dr. Babers and enclosed with it is the very fine little brochure describing the activities of the Florida Regional Medical Program. I thought the presentation was excellent and I am sure this will help all of us understand better just what the program means in Florida.

The JOURNAL of the Florida Medical Association might serve a useful purpose by re-emphasizing to each physician how he might use the program to the benefit of his own patients. Is there anything the individual doctor can or should do to help further the aims of this group? Is there any way the JOURNAL can help?

FRANZ STEWART, SR., M.D.
EDITOR

Dear Dr. Stewart:

You may be sure that your letter is greatly appreciated by those of us in the Florida Regional Medical Program, offering as it does even more assistance through the JOURNAL of the Florida Medical Association which has already been rather generous with support.

The JOURNAL can, indeed, play a vital role in calling to the attention of Florida physicians that FRMP is an organization to which they can refer health care delivery problems as they confront them in their own communities. It is not possible for us to know all the needs—and certainly I don't mean to imply that we can fill them even if we did—but the more information we have the better able we are to establish priorities for our efforts and apply the resources of the Florida Regional Medical Program in cooperation with the medical profession to achieve reasonable solutions of the problems.

While we operate under certain categorical limitations, it becomes readily apparent that health care delivery services do not group themselves neatly into categories and there is hope that as the program develops, it will be able to evaluate the problems in most areas of health. Only recently we completed the organization of a Diabetes Task Force under the chairmanship of James B. Tobias, M.D., of St. Petersburg, who is guiding the group in its efforts to assist in controlling this problem in the state. You already are familiar with the work of the Cancer Task Force, headed by William J. Harrington, M.D., of Miami; the Heart Task Force, headed by Simon Doff, M.D., of Jacksonville; the Stroke Task Force, headed by Francis L. Merritt, Jr., M.D., of Lakeland; the Continuing Education Task Force headed by Richard G. Connar, M.D., of Tampa and the Health Education Task Force, headed by Benton Clifton, Jr., of Tallahassee.

In all, these Task Forces are served by more than 100 volunteer physicians and other health service professionals, all vitally interested in their special areas and all willing and anxious to define Florida's problems, seek out solutions and press for the means for carrying out the solutions.

We all know that Florida Regional Medical Program will accomplish little or nothing without the support of Florida's medical population. This is why your willingness to extend the pages of the JOURNAL on our behalf represents a highly valued contribution toward the success of the Florida Regional Medical Program since it will facilitate communications with a group most important to FRMP, the physicians of the state.

H. PHILLIP HAMPTON, M.D.
TAMPA

Medicare Coverage For the Post-Hospital Patient

Frank D. White

Medicare's post-hospital benefits can be of valuable assistance to private physicians in elderly patient management. Extended care coverage offers payment for specialized treatment of patients whose medical conditions have improved or stabilized to a point that the depth and scope of acute hospital services are no longer necessary, but whose current condition still requires skilled nursing and therapy services.

Extended care benefit pays for an extension of hospital care, not an extended time period of care. A patient may be transferred from a hospital after three days or longer of treatment to a Medicare participating extended care facility or nursing home and receive further active treatment of the medical condition for which he was hospitalized. The objective may be restoration of function or palliative treatment.

The attending physician certifies that the patient requires post-hospital care at time of transfer. Or a patient may be admitted for extended care with his physician's certification if no more than 14 days have elapsed between the time of hospital discharge and admission to the facility. This provision answers the need of a patient who returns home from the hospital but consequently suffers a setback or medical complication.

Three fundamental considerations are essential to Medicare coverage of extended care: individual patient's current medical needs, specific services required to fill these needs and health personnel requisite to these services. For care to be qualified for payment, the patient's medical condition must necessitate a planned, organized, continuous treatment program involving multiple services that can only be personally supplied or given under the direct supervision of professional personnel.

A patient who only needs intramuscular injections twice a week would not qualify for payment; nor would the patient whose primary medical need is routine administration of oral medication. The patient with a primary diagnosis of senility can normally be cared for by a nonprofessional. Payment is not applicable in the management of a nonambulatory patient whose primary need is to have his position changed to prevent decubiti.

The kinds of services associated with post-hospital care include administration of oral medications requiring that the patient be under continuous observation; Levine tube and gastrostomy feedings; nasopharyngeal aspiration, and catheters —with the exception of routine care connected with indwelling bladder catheters. Obviously these examples do not come close to exhausting the types of skilled services considered integral parts of extended care; however, they illustrate the professional skill which distinguishes extended care from less intensive, long-term care. Within this framework of the patient's medical need for intensive nursing services, Medicare's extended care benefit will pay up to 100 days.

An extended care patient's medical requirements will also be evaluated by the institution's utilization review committee. If a patient at admission does not require skilled nursing services, or after a period of stay the primary need changes and can be met by nonprofessional personnel, the committee members consult with the patient's attending physician. Should this consultation confirm the initial judgment, the committee will recommend to the institution's administration that the patient's medical condition does not warrant extended care services. It might be noted that the utilization review committee at this point may also recommend the next appropriate level of care, if further less intensive care appears needed. Although Medicare strongly favors this approach, the program has no direct requirement for this recommendation.

Further details may be obtained upon request.

▶ Mr. White, Room 404, 50 71st Street Northeast, Atlanta. Georgia 30323.

Mr. White is assistant regional representative, Social Security Administration, Atlanta.

Peer Utilization Review

Richard M. Fleming, M.D.

The board of directors of the Florida Medical Foundation and the board of directors of Blue Shield of Florida, Inc., have entered into an agreement whereby, through the Florida Medical Foundation, the Florida Medical Association and its component county medical societies will provide medical peer review for Blue Shield and Medicare programs. Each county medical society has been asked to appoint a committee or designate an existing committee to serve at the local level, as only physicians practicing in the community can provide adequate peer review. This is a most important function. If we do not do it, someone outside the practice of medicine may.

When individual physicians' profiles and patterns of practice are referred to the county society by the Florida Medical Association, they should be reviewed at the earliest possible time and specific recommendations reported to the Association. The individual physicians' practice patterns will have been carefully screened and reviewed by the Blue Shield and Medicare Utilization Review committees, which are physicians in private practice, prior to being referred to the Florida Medical Association and, in turn, to the county medical society.

A Medical Peer Utilization Review Committee is being appointed by the Florida Medical Association to perform this function where a county society is unable to do so. We are attempting to negotiate reasonable reimbursement for both administrative overhead and physician services devoted to peer utilization review cases. Each county society is being requested to keep a record of administrative costs and the time spent by physicians in this activity.

We are in a most favorable position to provide a very necessary service which physicians can best provide. The patient will be better served, the cost will be less, the medical profession will retain the initiative and the individual physician will be reimbursed for his services. This is worthy of our sincere and complete cooperation.

FMA 1970 Legislative Program

Sanford A. Mullen, M.D.

The Florida Medical Association recently established a full-time capitol office in Tallahassee. Mr. Donald S. Fraser, director of the FMA Public Affairs Department, is manager of the office, which is located in Suite 780 of the Tallahassee Bank Building. The telephone number is (904) 224-6496.

In view of annual legislative sessions and the increased between-session activities of the standing legislative committees, it became imperative that a full-time capitol office be established. This office should enable the Association to increase its effectiveness and communication with the members of the legislature and county medical societies. This office is under the direct supervision of the FMA executive vice president and all of its activities are coordinated by the executive vice president and the Committee on State Legislation.

The capitol office staff will publish frequent legislative bulletins, furnish each county medical society with a copy of the legislative program, and will keep local societies thoroughly informed about current legislative activities.

The FMA Council on Legislation and Public Agencies, under the chairmanship of Dr. Joseph C. Von Thron of Cocoa Beach, coordinates and implements the activities of the Association which pertain to state and national legislation and maintains liaison with governmental agencies rendering health services.

The Committee on State Legislation is presently composed of the following five members: Dr. Sanford A. Mullen of Jacksonville (chairman), Dr. Louis C. Murray of Orlando, Dr. Richard S. Hodes of Tampa, Dr. David C. Lane of Fort Lauderdale and Dr. Joseph H. Davis of Miami.

The FMA has determined that the main priority for the 1970 legislative session is the passage of positive legislation in the area of professional liability and malpractice insurance. Several bills are being developed by the FMA legal counsel

Dr. Mullen is chairman, Committee on State Legislation, Florida Medical Association.

on the subject of professional liability. These include:

(1) Posting of bonds (a plaintiff must post a bond in a malpractice suit).

(2) Locality rule (expert witnesses must be licensed and practicing in the state of Florida).

(3) Statute of limitations (two years from knowledge of the alleged malpractice and four years from the date of treatment).

(4) Doctrine of informed consent (limitation of liability).

(5) Res ipsa loquitur (elimination of the doctrine, "the thing speaks for itself").

(6) Expert witness (a physician would not have to testify against himself as an expert).

Two bills from the 1969 session are of serious concern to the Association. These are C.S. for H.B. 348 (hospital staff privileges for osteopaths and others) and H.B. 994 (chiropractic insurance bill). The former bill would tend to force osteopaths and other licensed practitioners on the attending staffs of accredited hospitals and would diminish the authority of local hospital boards of trustees and medical staffs to determine who shall be admitted to practice. This bill passed the last session of the legislature but was vetoed by Governor Kirk. It is one of the FMA's major objectives to see that the governor's veto of this unwise legislation is sustained.

H. B. 994 requires that all health and accident insurance contracts must provide for payment or reimbursement for services of practitioners such as chiropractors and naturopaths for any service they are allowed to perform under Florida law. Furthermore, the bill prevents freedom of contract between the insurance buyer and the insurance company by forcing the buyer to pay for coverage he may not want. This bill is now in the House Rules Committee and will go on the calendar at the beginning of the regular 1970 session. The FMA has taken a strong position urging the defeat of this legislation.

The capitol office also operates a capitol dispensary for the members of the legislature and their staffs. This dispensary is manned by physicians from all over Florida who volunteer their services for one day during the legislative session. Interested Florida physicians are urged to contact the capitol office in order to make arrangements to serve in this program.

Physician of the Day and the Capitol Dispensary

Sanford A. Mullen, M.D.

Volunteers are needed to serve as "Physician of the Day" in the state capitol dispensary. The FMA Committee on State Legislation is actively seeking physicians who are willing to give a day of their time during the forthcoming legislative session. This program not only meets a very real need in health care for our legislators and their staffs but is proving to be a vital factor in improving physician-legislator relations.

As recently as 1966, the doctor for the Florida House of Representatives was a naturopath. In 1967, four medical doctors and one dentist were elected to the legislature and they saw the critical need to establish a legislative dispensary under medical supervision with accompanying high standards of professional care.

The dispensary began that year in a small room (9 by 12 feet) with a full-time registered nurse during the session, Mrs. Delma Hart, but with only minimal supplies and equipment. In the opening days of the session, it was referred to by Mrs. Hart as "the little room behind the store," because it was the room adjacent to the supply room of the House Sergeant-at-Arms' office.

When the 1967 legislature convened in April, five to six patients a day were seen. As the session progressed, so did the patient load. As the 60-day session stretched into September, 20 to 30 patients a day were treated in the clinic by doctors from the Panhandle to the Everglades. Many of the medications were given in sample form by the doctors themselves.

In February, 1969, the legislative clinic was permanently established under the House/Senate Joint Management Committee with Mrs. Hart being retained on a full-time basis. During the 1969 session, the clinic was moved to larger quarters with improved equipment and Mrs. Hart was given assistance in the form of a licensed practical nurse and a full-time secretary. During the 1969 legislature some 55 to 60 doctors served their one day "hitch." The patient load had increased with as many as 50 to 55 patients a day

being cared for. Since 1967, the clinic has had patients with minor to severe problems. A great deal of credit must go to members of the Leon-Wakulla-Jefferson County Medical Society for their willingness to cooperate and see referred patients in their offices or in the Tallahassee Memorial Hospital emergency room.

The clinic has rendered service not only to the legislative body but to employees of the governor's office and other state agencies in the capitol who come to the clinic for first-aid treatment. Emergency aid is also given to out-of-town or out-of-state visitors in Tallahassee for the legislative session. Throughout the entire program there has developed a feeling of great respect and understanding between the doctors and the members of the legislature.

During the 1970 session, the FMA has reserved a room at the Quality Court Motel which can either be shared by two physicians or by a physician and members of his family during the time they are serving as "Physician of the Day." In addition to the recognition given when the physician is introduced on the floor of the House and the Senate, there is opportunity for the visiting physicians to meet their legislators either at frequently scheduled social activities in the evening or at luncheon engagements.

The Committee on State Legislation needs physicians to volunteer their time to help make the FMA legislative program more effective. Participation in the "Physician of the Day" program is an extremely satisfying way to help the FMA. It gives the physician a chance to see legislation being developed at first hand. By becoming involved in legislation, the physician can give the benefit of his medical expertise to the legislators and provide a real service to all citizens of Florida as well as to his profession.

▶ Dr. Mullen, P.O. Box 2921, Jacksonville 32203.



Rep. Lew Brantley of Duval County is checked in capitol dispensary by Dr. Edward G. Haskell Jr. of Tallahassee, assisted by nurse Delma Hart.

On To Orlando!

Richard M. Fleming, M.D.

This is the second and final call for the conference of county medical society presidents and secretaries. The meeting takes place in Orlando on Saturday, January 31, 1970 and all FMA members are not only invited but urged to attend. As a matter of fact, it would seem to me that the meeting is of such general interest and importance to the entire membership that it should be re-named "The Interim Meeting of the FMA" or given some other appropriate designation.

At any rate, it will be well worth your time to make a little extra effort to attend. Reservations may be made by advising your county medical society officers of your plans to attend. Your own hotel reservations should be made with the Robert Meyer Motor Inn. The program follows:

Twelfth Annual Conference for Presidents and Secretaries of County Medical Societies

Robert Meyer Motor Inn
Orlando, Florida
January 31, 1970
Sponsored by the Florida Medical Association

Morning

Henry J. Babers Jr., M.D., President, Presiding

9:00 Registration

9:15 Introductory Remarks—Dr. Babers

9:30 "Voluntary Health Agencies"—Frank L. Creel, M.D., Chairman, FMA Council on Voluntary Health Agencies

10:00 "Emergency Medical Service"—James L. Campbell Jr., M.D., Chairman, FMA Committee on Emergency Medical Service

10:30 — Coffee and Coke Break —

10:45 "Hospital Relations (Florida Joint Commission; Suits; Incorporation of Medical Staffs; Model By-laws)"—Vernon B. Astler, M.D., Chairman, FMA Committee on Hospitals and Extended Care Facilities

11:15 "Legislative Program"—Sanford A. Mullen, M.D., Chairman, FMA Committee on State Legislation

11:45 "Woman's Auxiliary"—Mrs. C. H. Gilliland, President

12:15 — Buffet Luncheon — "The National Medical Scene," Ernest B. Howard, M.D., Executive Vice President, AMA

Afternoon

James T. Cook, M.D., President-Elect, Presiding

2:00 "Peer Utilization Review (Medicare, Medicaid, Blue Shield, Commercial Health Insurance)" —H. Phillip Hampton, M.D., FMA Past President; Mr. W. Joe Stansell, Vice President for Physician Affairs, Blue Shield of Florida

2:45 "Medical Economics: Relative Value Studies; Workmen's Compensation"— Jack A. MaCris, M.D., Chairman, FMA Council on Medical Economics; Fred A. Butler, M.D., Chairman, FMA Committee on Relative Value Studies; Joseph G. Matthews, M.D., Chairman, FMA Council on Specialty Medicine

3:30 — Coffee and Coke Break —

3:45 Department of Health and Rehabilitative Services—James A. Bax, Ph.D., Secretary

4:10 Florida Regional Medical Program—Granville W. Larimore, M.D., State Director

4:30 Audience Participation—Questions and Answers

5:15 Adjournment

6:00 Reception

Sunday Morning

9:00 a.m. - 12:00 noon

Seminar on State Legislation

The Fall Meeting of the Board of Governors

(Continued)

Richard M. Fleming, M.D.

The volume of business conducted at this meeting was so large that publication of a complete report in the Journal is not practical. A summary of some of the more important actions taken follows below and the complete minutes are available at the FMA offices in Jacksonville to anyone who would like more detail.

Program Effectiveness System for Health Care

Dr. Phillip Hampton made a presentation describing the development of computer servicing agents to provide services to physicians in helping with their accounts and relating physicians' activities to the normal so that third party payment plans may be administered more efficiently. Ultimately this information could be used for peer utilization review, about which there is a report in this issue. Funds are available from the Department of H.E.W. for conducting a pilot project in Hillsborough County with eight or ten physicians participating initially. The board of directors of the Florida Medical Foundation will contract with the Department of H.E.W. to use the facilities of an existing computer company to provide these services. It is hoped that 100 physicians will be participating by the end of the year. Eventually this service would be available for any part of the country.

Criteria for FMA Approval of Postgraduate Education Courses

This was amended to allow the chairman of our Committee on Postgraduate Education or his representative to attend without charge any course requesting FMA approval, sponsorship or co-sponsorship.

Future Annual Meetings of FMA

The Board approved the 1975 annual meeting being held at the Americana and the 1976 meeting at the Diplomat Hotel. For 1977 and beyond, the Fontainebleau and Disney World will be considered.

Joint Meeting of the Executive Committee of the FMA with the Executive Committee of the Florida Hospital Association

This Meeting was held September 30, 1969 to discuss relationships between medical staffs, boards of trustees and administrators of hospitals and methods of investigating and solving problems surrounding these relationships.

Among the recommendations approved were the following:

1. That there be established a Joint Committee for Review of Hospital-Physician Relations, composed of representatives of the Florida Hospital Association and the Florida Medical Association, and that the FMA representatives be the Committee on Hospitals and the Executive Committee. This joint committee would undertake to:
   a. Consider the qualifications for individuals to serve as hospital trustees.
   b. Work on a model charter for hospital corporations.
   c. Consider the nature of various contracts between physicians and hospitals.
   d. Promote the principle of elected public officials not serving as trustees.
   e. Consider the problem of allied personnel.
2. The Executive Committee emphasized that health professionals must be dominant in comprehensive health planning both at the state and the local levels.
3. The representatives of the Florida Hospital Association stated that current policy of the FHA has no objection to physicians serving on hospital boards, provided they are selected in the same manner as other members of the board (received as information).

This joint meeting would seem to me to be one of the most important things that has happened in medical staff-hospital relations in a long time. A realization that our problems are mutual and a determination to work them out together will do much to resolve many of the conflicts in the hospitals which we have experienced in the past. This is one of the helpful side effects of Medicare and other government medical programs!

Assignment of AMA Delegate to each Reference Committee

He will act in an advisory capacity to keep the Committee informed of A.M.A. position or policy on matters under discussion; conversely, he will be able to keep the A.M.A. informed of attitudes and positions at the "grass root" level.

Professional Liability Insurance Program

Executive Vice President Harold Parham told the Board that he had met recently with the carriers of the Association's group professional liability coverage. Effective January 1, there will be an 18% increase in rates, which will bring our rates up to Bureau rates. There also will be added a provision that no non-Florida licensed physicians will be covered, and that coverage will be refused when a criminal act has been committed. This was received by the Board as information.

The Board recommended that a mechanism for a medical defense fund being considered for establishment by the Association be formulated for consideration at the next meeting of the Board of Governors.

Report of the Ad Hoc Committee on Implementation of Title XIX in Florida

It was noted that the appropriation for this program by the legislature is inadequate and unrealistic. Alternatives and methods of receiving federal matching funds were considered. It was pointed out that the state's program has not yet been approved by the Department of H.E.W., and it was the consensus that the Association has nothing on which to take action until such time as an acceptable program has been developed by the state.

Many other items considered and/or actions taken have been or will be reported in separate articles in the JOURNAL. In addition, there was a vast amount of work reported on and discussed by the chairmen of the councils, the editor of the JOURNAL, the secretary of the newly-formed state Department of Health and Rehabilitative Services, the president of Blue Shield and others.

I am continually amazed to see the quantity of work and the diversity of problems which must be constantly handled by our Association. That the work is handled so smoothly and efficiently is not only a great tribute to our officers and particularly our President, but also an index to the great number of hours which are contributed to the job. It goes without saying that despite the greatest effort by your elected officers, none of this would be possible but for the devoted efforts of Harold Parham and his wonderful staff.

Putnam County Physicians Sponsor Exhibit at Fair

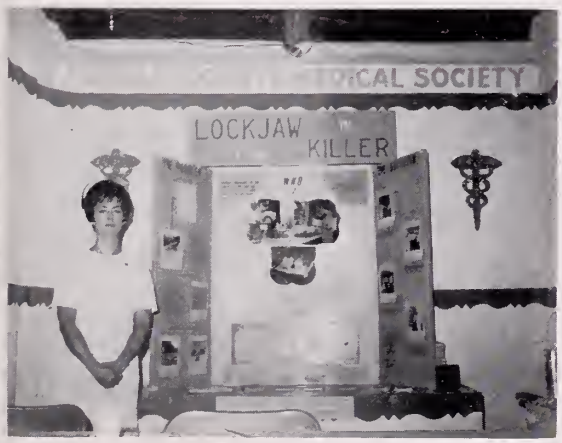
Dear Editor:

I would like to have an item and picture in our Florida Medical Association JOURNAL as I believe other county societies with membership similar to ours may be interested in using this exhibit in their localities.

The Putnam County Medical Society sponsored an exhibit booth at the annual county fair beginning November 12 and ending November 15. The subject this year was tetanus and the exhibit shown was constructed and loaned by the Florida State Division of Health. Dr. E. Charlton Prather directed the activity and assisted the local society in setting up the exhibit.

Complimentary tetanus toxoid injections were given daily to persons desiring this immunization. Members of the Woman's Auxiliary to the Putnam County Medical Society and local nurses voluntarily staffed the booth.

LAWRENCE G. HEBEL, M.D.
PALATKA



The exhibit as sponsored by the Putnam County Medical Society at the local county fair. *(Dr. Hebel failed to identify the attractive nurse. We are not certain if she comes with the exhibit.—Ed.)*

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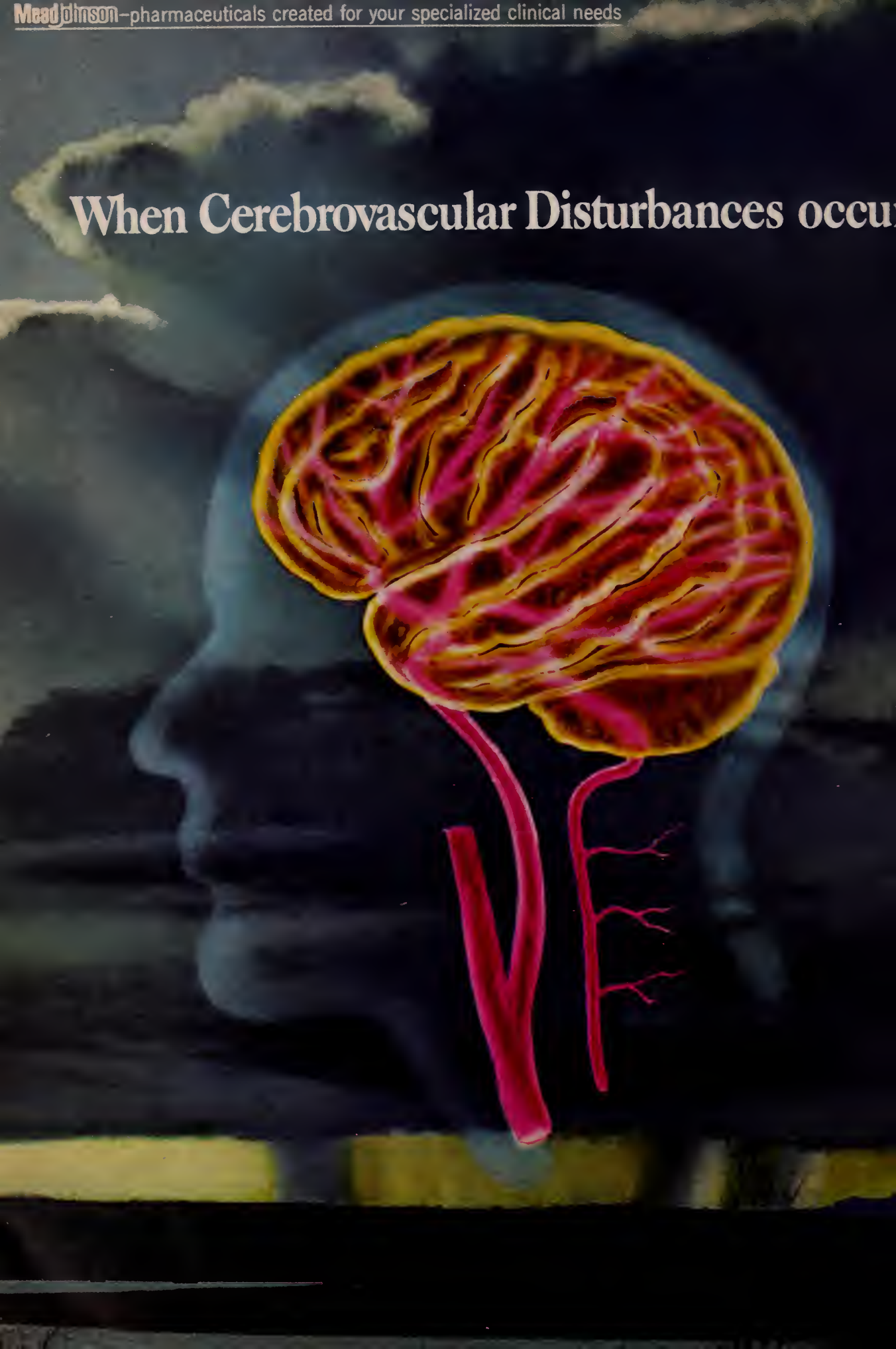
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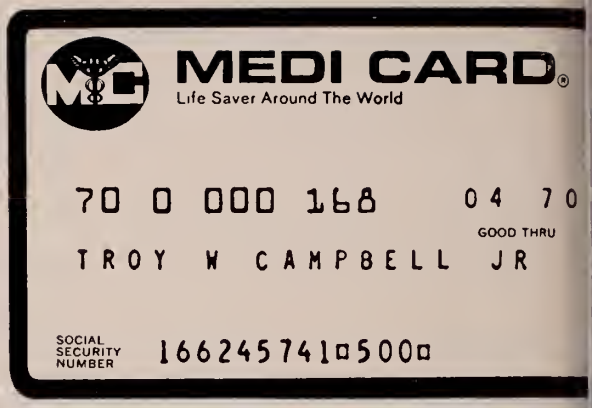
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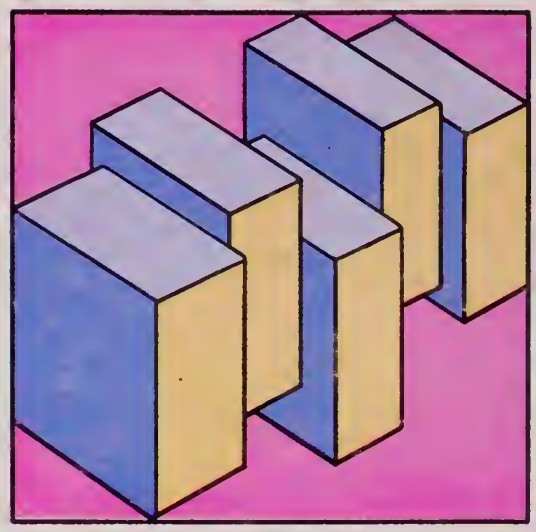
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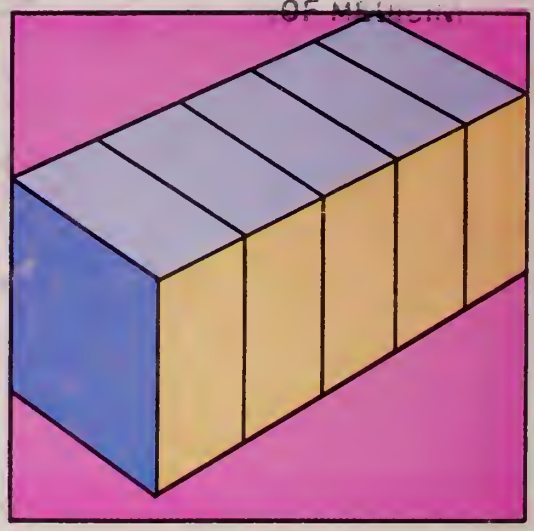
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from the discord of anxiety...



to emotional harmony

Before prescribing, please consult complete product information, a summary of which follows:

INDICATIONS: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
PRECAUTIONS: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
ADVERSE REACTIONS: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido--all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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FEBRUARY, 1970 • VOLUME 57 • NUMBER 2



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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL, One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given the drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

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Number of patients	Mean initial value	Mean final value
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16	3.50	4.40
25	4.52	4.47

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spares the potassium

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Precautions: Do periodic serum electrolyte determinations. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Adjust dose of antihypertensive agents given concomitantly.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, altered carbohydrate metabolism, hyperbilirubinemia, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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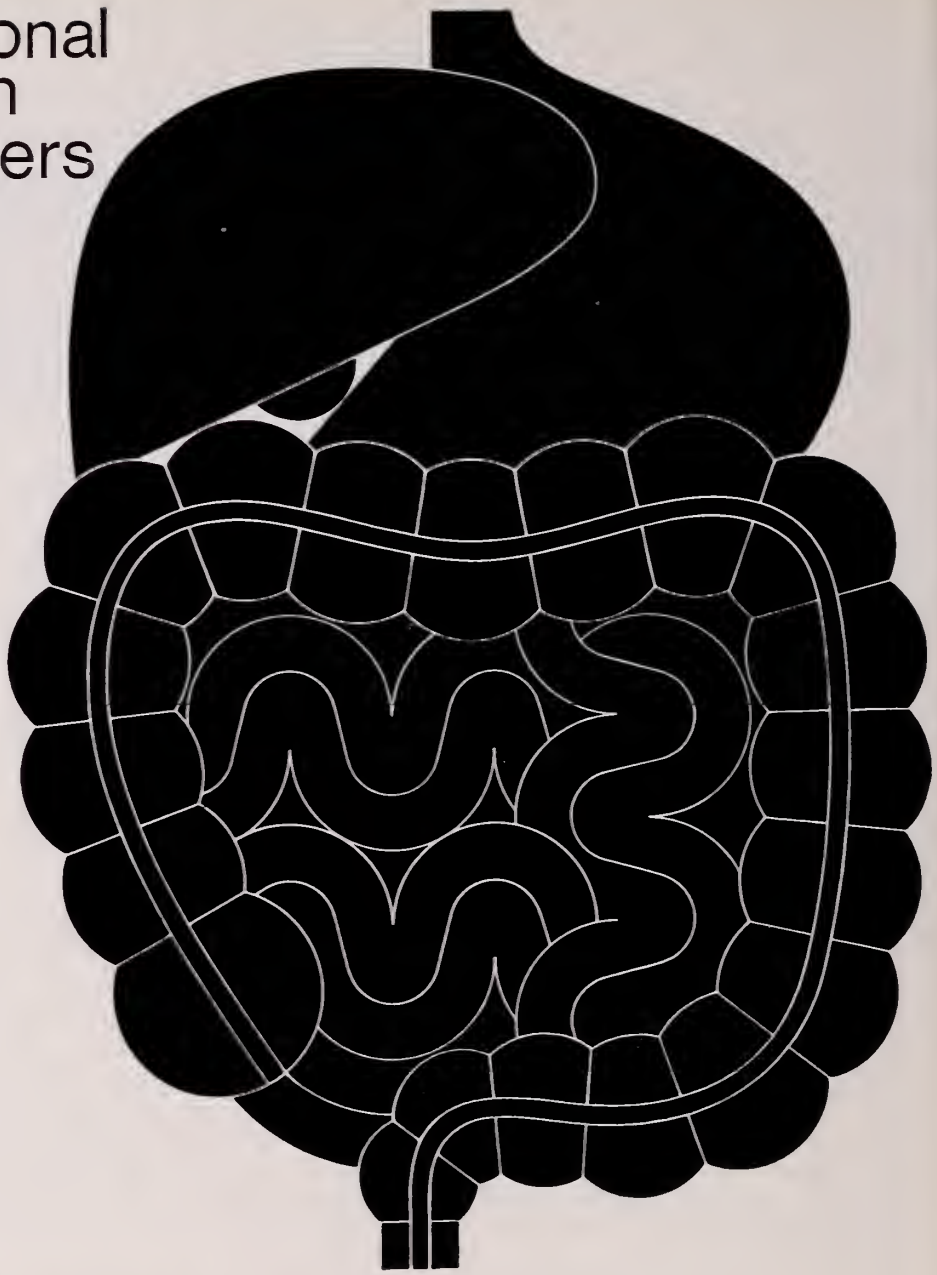
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Unfinished Business

In 1970 the FMA will face some serious situations. Your Board of Governors, councils, and committees will need help and understanding. I can only mention a few of our problems on this page but perhaps this will encourage each of you to seek more facts before our House of Delegates meets in May 1970. Some of these problems are:

1. Medicaid in Florida

Medicaid was put into effect by the Florida legislature on January 1, 1970 after last minute approval by HEW. The physicians' portion of the medical services provided were grossly underfunded by state appropriation. Whatever the motives were, the method taken was unfair and discriminatory at least for the first six months of the program. The details cannot be covered here but at least I can refer you to three communications which are available:

(a) You have all received the letter dated December 17, 1969 from the Division of Family Services (part of the Department of Health and Rehabilitative Service of the state of Florida). This was sent out for Dr. James A. Bax over the signature of Mr. Emmett S. Roberts. This letter is fair and factual. I feel that Dr. Bax and Mr. Roberts are doing the best they can in a difficult situation not of their making. Please read the letter again.

(b) On December 19, 1969, Dr. Jere W. Annis wrote a letter to Sen. Louis de la Parte setting the record clear about physician attitudes on Title XIX. You should read it. FMA headquarters can furnish you a copy should you wish. Dr. Annis' views certainly have my endorsement.

(c) The Journal of the Florida Academy of General Practice (*Florida Family Physician,* Vol XX, No. 1, published January 1970) has a number of excellent articles which put many legislative issues in clear perspective. I congratulate Dr. S. J. Alford, the editor, for this excellent presentation. On page 4, Dr. James T. Cook has written an editorial on Medicaid in Florida which you should read. It will give you additional information.

2. The Workmen's Compensation fee schedule continues to be a thorny problem. Dr. Joseph Matthews and his committee and others before them have done all in their power to get the program cleared up—so far, to no avail. We simply have not been fairly treated in this matter to date.

3. At the AMA meeting in Denver in 1969, a report of the "Committee on Planning and Development" of the AMA chaired by Dr. George Himler of New York was made. This voluminous report made a number of recommendations which did not meet the approval of many of the delegates. There was a minority report of the committee itself. As a result, the entire Himler report was referred to each state medical association for consideration. Dr. Francis Holland, chairman of our AMA delegation, has been requested to inform all of you about this report. Please be alert to information about it.

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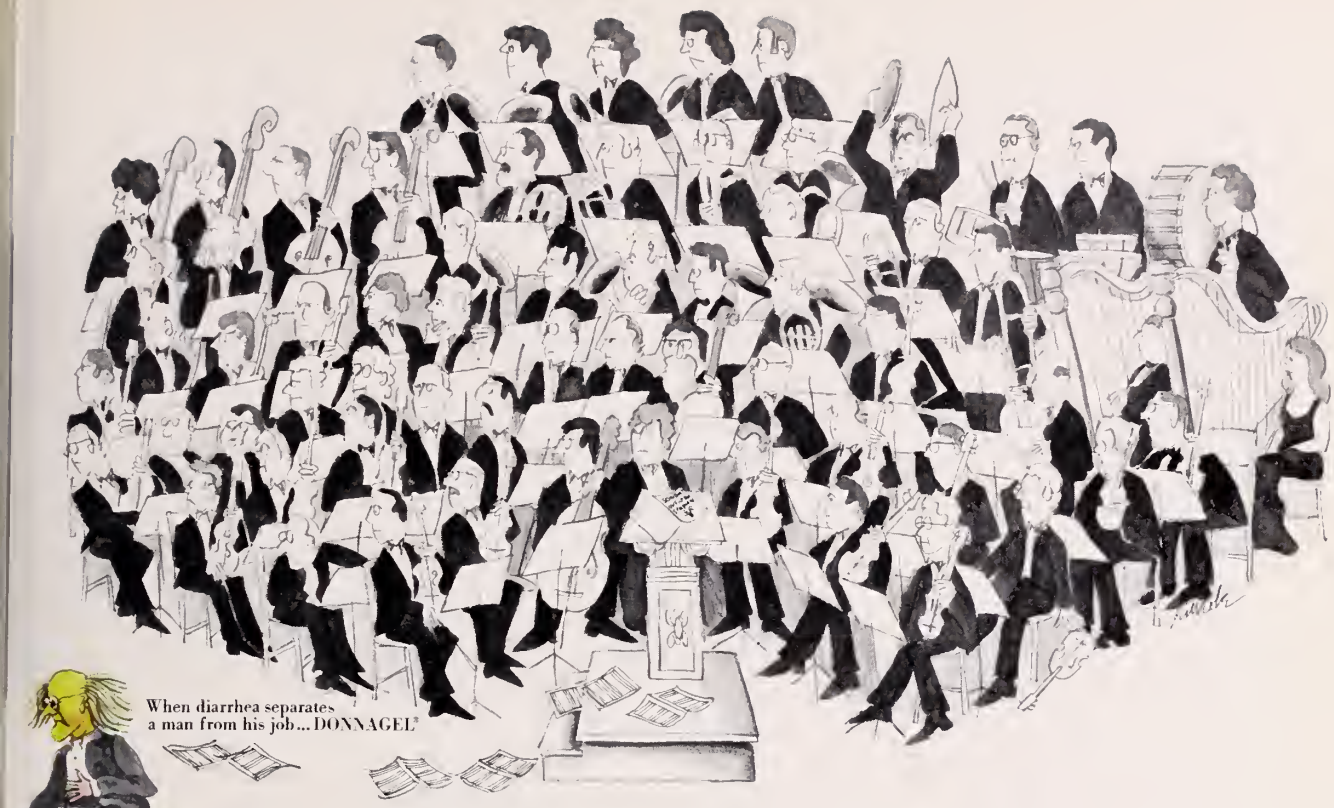
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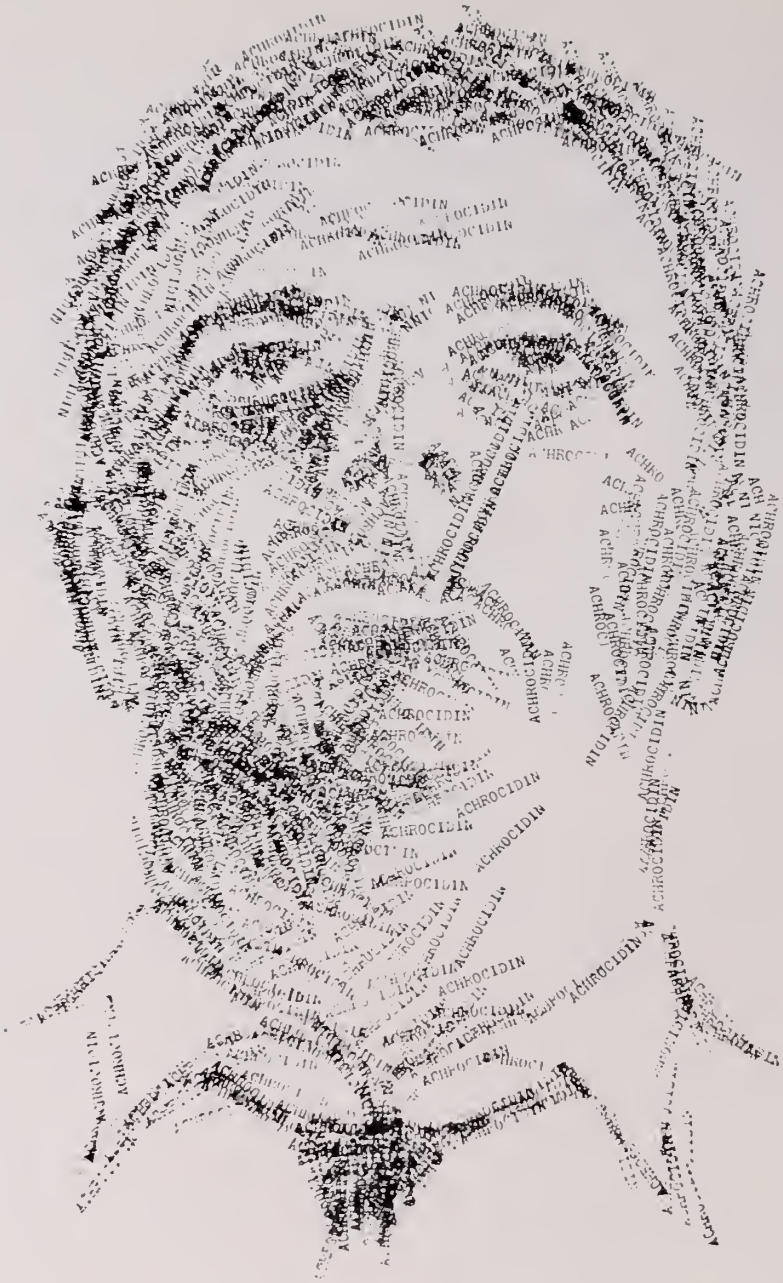
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Methods and Indications for Temporary and Permanent Cardiac Pacing

Morton Korn, M.D., William H. Bernstein, M.D.
and Philip Samet, M.D.

Cardiac pacing by electrical techniques has developed rapidly in the past decade. Since Zoll[1] originally described the use of external cardiac pacing in the treatment of asystole, indications as well as techniques have proliferated. Cardiac pacing now is highly sophisticated, yet important to every physician.

In this paper we briefly review the indications for cardiac pacing and methodology. Detailed discussions are available in the literature.[2-5] Three basic questions may arise: which cardiac chamber is preferred for pacing, how is it done, and why.

Preferred Cardiac Chamber

Many experimental and clinical studies have clearly established the physiologic superiority of atrial as opposed to ventricular pacing.[6-9] At similar ventricular rates, cardiac output is 10% to 20% higher during atrial pacing, both in complete heart block and in sinus rhythm. Systemic arterial pressures also are higher. These differences are based upon the atrial contribution to ventricular function, the atrial "kick" mechanism. Atrial pacing is, therefore, utilized when possible.

Techniques of Pacing

External chest wall stimulation is rarely utilized since applications of electrical stimuli strong enough to result in cardiac depolarization cause considerable pain and eventuate in skin burns. This procedure has been replaced by internal pacing.

Cardiac pacing may be performed by three techniques: fixed rate, P wave synchronous, and demand. In fixed rate pacing, stimuli appear at a constant rate regardless of underlying rhythm (Fig. 1). If normal sinus rhythm returns in a patient formerly in complete heart block, pacer stimuli can occur at the apex of the preceding T wave in the so-called vulnerable phase of the cardiac cycle and cause repetitive ventricular firing, i.e., ventricular tachycardia or fibrillation.

The second technique is P wave synchronous in which the ventricular pacing stimulus and the cardiac rate follow the sinus rate up to a maximum of 125/min. (Fig. 2) because of a built-in pacer refractory period of 480 msec. A pacer stimulus and a paced ventricular beat follow each P wave. If the atrial rate exceeds 125/min., 2:1 pacer block occurs.

As originally conceived, in true demand pacing, the third mode, a pacer stimulus appears only if the intrinsic ventricular rate falls below the preset pacer rate. Thus, if the rate is set at 60/min., a stimulus appears only if the spontaneous electrocardiographic QRS to QRS interval exceeds one second. If the rate is set at 30/min., a stimulus appears if the interval exceeds two seconds. This is known as QRS blocking demand pacing (Fig. 3). The second variety of demand pacer, called standby rather than true demand, is QRS synchronous and functions like the blocking pacemaker when the spontaneous rate falls below the preset pacer rate. When the heart rate exceeds the demand pacer rate, the pacemaker spike is "synchronized" to the QRS complex and appears within and distorts the spontaneous QRS complex

From the Division of Cardiology, Department of Internal Medicine, Mount Sinai Hospital, Miami Beach.

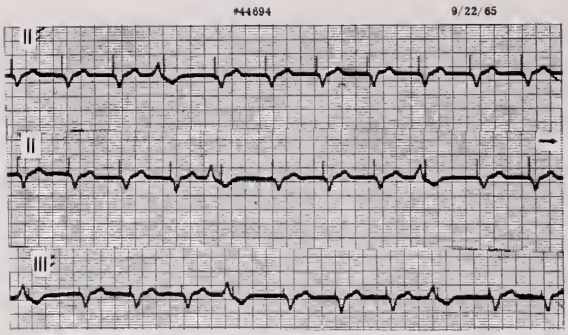


Fig. 1.—Fixed rate pacing in a patient with atrial fibrillation, complete heart block and ventricular premature beats. Pacing stimuli may fall in the vulnerable period under these circumstances.

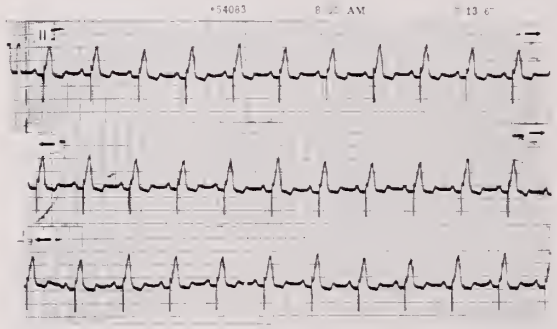


Fig. 2.—P wave synchronous pacing. Each P wave is followed by a pacer stimulus and a paced QRS complex. Physiologic variations in the ventricular rate may occur.

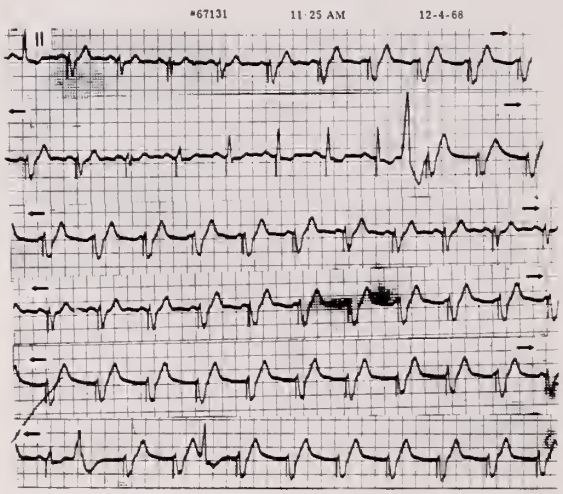


Fig. 3.—QRS blocking demand Medtronic pacer. The first complex in the first strip is a conducted beat. The next six QRS complexes are true fusion beats. The last four complexes in the first strip are paced beats with varying P-QRS temporal relationship. The 6th, 7th and 8th QRS complexes in the second strip are pseudo-paced beats. These QRS complexes are normally conducted QRS complexes, distorted by the pacer stimulus which is ineffective since depolarization by the normal pathway has occurred. Most of the remaining beats are paced beats.

(Fig. 4). The same phenomenon is observed whenever any spontaneous beat occurs.

Advantages and Disadvantages

The electronic components of the fixed rate pacer are relatively simple, but competitive cardiac rhythms may occur if normal conduction returns. In P wave synchronous pacing, physiologic stimuli alter the atrial and ventricular rates as occur under normal conditions; in addition, the atrial contribution to ventricular function is maintained. It is more complex electronically; however, this has not been a significant problem. The demand pacers, QRS blocking and QRS synchronous, have advantages and disadvantages,. The principal disadvantage of the QRS synchronous is the necessity for a refractory period to keep the maximum rate at 120 (refractory period 500 msec.) or 150 (refractory period 400 msec.). It produces stimuli at all times with both paced and conducted complexes; therefore, the battery life is probably less. The QRS blocking pacer may be inactivated by patterns produced by external electrical stimuli and erroneously interpreted as QRS complexes. In our experience both varieties of demand pacers have failed to sense ventricular premature beats on occasion.

Pacing Therapy

Cardiac pacing may be epicardial and endocardial. The former requires a thoracotomy, the latter is done pervenously; in both the power pack is implanted subcutaneously. Epicardial pacing has more morbidity and mortality and is rarely utilized at our institution unless a thoracotomy is performed for other reasons such as concomitant cardiac surgery or in the presence of a prosthetic tricuspid valve due to underlying rheumatic heart disease. We have utilized the epicardial procedure only three times in the past four years.

We no longer utilize fixed rate ventricular pacing for the reasons previously mentioned. Pervenous two catheter (in the right atrium and right ventricle) P wave synchronous pacing has presented unresolved technical problems of P wave detection (in marked contradistinction to epicardial P wave synchronous pacing). We therefore employ pervenous demand pacing with QRS blocking and QRS synchronous units as the standard mode of therapy. Right atrial pacing is done only on a temporary basis, and right ventricular on a temporary or permanent basis.

Indications for Cardiac Pacing

Drug therapy with atropine, isoproterenol, catecholamines, digitalis and the anti-arrhythmic agents such as quinidine, procainamide, lidocaine, dilantin, and propanolol occupies a prominent place in the management of cardiac arrhythmias. In this presentation, however, we are concerned with the role of cardiac pacing in the treatment of arrhythmias.

Therapy of bradyarrhythmias has been the classic indication for cardiac pacing. These disturbances are divided into those with normal and impaired atrioventricular conduction. The former group includes most cases of sinus bradycardia, sinus arrest and sino-atrial block. Since atrioventricular conduction is by definition intact in these patients, atrial pacing is preferred to increase the ventricular rate, at least on a temporary basis. It must be emphasized, however, that before pacing is utilized, atrioventricular conduction must be evaluated in each patient. In the normal subject progressive prolongation of the P-R interval occurs during atrial pacing, but 1:1 atrioventricular conduction is observed up to rates of 140-160/min. If 1:1 conduction is noted up to at least 120/min., we have no hesitancy in utilizing atrial pacing for slow ventricular rates. Conversely, if any form of second degree atrioventricular block is observed at paced atrial rates of less than 120/min., ventricular pacing is the preferred mode. Atrial pacing is employed on a temporary basis for symptomatic sinus bradycardia, sinus arrest or sino-atrial block. In the presence of acute myocardial infarction, temporary atrial pacing has been used as treatment for selected asymptomatic patients. Permanent pacing therapy for these bradyarrhythmias with normal A-V conduction has been reserved for the symptomatic patient; only ventricular pacing has been used since permanent atrial pacing without thoracotomy is as yet an unproven therapeutic modality.

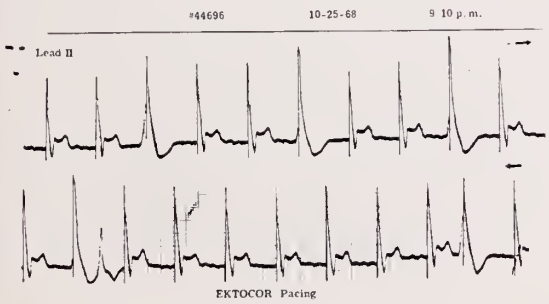


Fig. 4.—Atrial fibrillation in a patient with a pervenous implanted Ectocor QRS synchronous demand pacer. Some beats are paced, others are spontaneous or conducted. The latter QRS complexes are initiated by an upward deflection (3rd, 6th, and 9th beat in upper strip) while the paced beats are indicated by the initial downward directed pacer stimulus as in the first two beats of the upper strip.

Bradyarrhythmias with atrioventricular conduction disturbances, i.e., second and third degree A-V block and first degree A-V block with development of second degree A-V block at atrial pacing rates of less than 120/min., are treated only with pervenous right ventricular pacing, whenever pacing is clinically indicated. Temporary ventricular pacing is utilized for all forms of second and third degree A-V block associated with acute myocardial infarction. While some observers distinguish between Mobitz types I and II (pacing for the latter but not the former), we utilize pacing for both varieties of second degree A-V block complicating acute myocardial infarction. Since acute A-V block in acute myocardial infarction is usually transient, permanent pacing is rarely required. Patients with chronic second and third degree A-V block receive temporary and later permanent demand pacing therapy only if they have symptoms such as Stokes-Adams episodes. Less frequently, temporary ventricular pacing is required for heart block associated with digitalis therapy or hyperkalemia.

Cardiac pacing is also utilized under several other circumstances. Multiple ventricular premature beats or runs of ventricular tachycardia in the presence of moderate sinus bradycardia or normal sinus rhythm can be "paced away" by temporary atrial pacing or by temporary or permanent ventricular pacing. Another use of ventricular pacing is in symptomatic patients with bilateral bundle branch block or trifascicular block. Specific electrocardiographic patterns raise suspicions of such varieties of atrioventricular conduction disturbances in which the P-R interval may be normal or exhibits only first degree atrioventricular block. Finally, atrial pacing has been employed in a variety of supraventricular arrhythmias such as atrial flutter and atrial tachycardia.[10] Rapid atrial stimulation (400-1200/min.), employed by our group in more than 50 patients, results usually in conversion to atrial fibrillation or sinus rhythm with a decrease in ventricular rate in either case. This therapy is especially useful in digitalized patients in whom the possibility of toxicity contraindicates attempted external cardioversion.

To better follow up patients with permanent pacers, a special clinic has been established at Mount Sinai Hospital. Patients are seen at frequent intervals and varied pacemaker parameters

carefully analyzed to detect early pacer failure, preferably in the preclinical stage."

Summary

Cardiac pacing is reviewed briefly from the viewpoint of the preferred cardiac chamber for pacing, techniques, and indications. Some new indications for pacing also are discussed.

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editorial comment

CLARENCE M. GILBERT, M.D.

This timely review article concerning pacemaker therapy from the Division of Cardiology, Mount Sinai Hospital, by Drs. Korn, Bernstein and Samet summarizes the current techniques and uses for cardiac pacemakers. This is a rapidly expanding field of medical technology in which the final chapter is yet to be written. A sequel article documenting the results and complications of therapy would also be most informative.

Dr. Gilbert, 215 East Jackson Street, Orlando 32801.

Surgical Blood Loss Associated With Various Anesthetics

Richard B. Clark, M.D. and C. Elmer Davis, M.D.

For years, various anesthetics have been suspected of causing excessive bleeding during surgery. Cyclopropane was and still is the leading contender; however, others have been incriminated such as thiopental+[1] and halothane.* Spinal anesthesia[2] also has been suspected. There is very little objective evidence to support or refute these claims. Most studies[3-5] have been concerned with the effects of anesthetics on the coagulation process. Several communications have attacked the problem directly. Seldon et al[1] studied the effects of various anesthetics on blood vessel caliber in the rabbit's ear. They found vasodilatation with thiopental, and suggested this phenomenon as the cause for excessive bleeding during thiopental anesthesia, a problem not reported by present day surgeons. Interestingly, they did not find vasodilatation associated with cyclopropane.

McLoughlin[6] measured the amount of bleeding by skin puncture with a 3 mm. lancet in unanesthetized patients, and those under diethyl ether and cyclopropane anesthesia. Both ether and plane I cyclopropane anesthesia produced more blood loss than no anesthesia. Deeper cyclopropane anesthesia resulted in one and one-half times more loss than ether, while hyperventilation through soda lime resulted in decreased bleeding.

During conjunctival surgery, blood loss was greater under trichlorethylene than under halothane anesthesia.[7] Major vaginal surgery produced no significant differences in blood loss when general anesthesia was compared with epidural anesthesia.[8]

Procedure

In this study, cyclopropane, halothane, and spinal anesthesia using tetracaine** were evaluated as to their contributions in blood loss from a standard surgical incision. The study was primarily set up to compare loss during halothane and cyclopropane anesthesia, although we also had the opportunity to observe patients under spinal anesthesia.

Males between 18 and 60 years who were to undergo surgery for inguinal hernia through the standard inguinal incision were selected. None had blood clotting defects nor previous groin surgery; 93% were Caucasian. Bleeders were clamped immediately. Four-inch by eight-inch gauze strips were used to pick up shed blood and were weighed immediately. The shed blood was assumed to weigh 1 Gm. per cubic centimeter. Upon reaching the aponeurosis of the external oblique the study was discontinued. If apparent, blood vessels were clamped before they were incised.

Patients receiving spinal anesthesia were given a prophylactic vasopressor (ephedrine 50 mg.) with the local skin wheal. Anesthetic level was T_6 to T_8. Patients receiving general anesthesia were induced with intravenous thiopental. General anesthesia patients received atropine, 0.4 mg., along with meperidine* and pentobarbital,** an hour before surgery. Spinal anesthesia patients did not receive atropine, but did receive pentobarbital and meperidine. Patients receiving general anesthesia were assisted in their respirations throughout. Cyclopropane patients were maintained at plane II level (no oscillation of eyeballs), and halothane patients were maintained with N_20 and 0_2 50%, and 1.0%-1.5% halothane, adequate for the surgery.

Surgery was performed by 17 experienced surgeons, all in private practice. Anesthesia was performed by one of five anesthesiologists or one of ten nurse anesthetists. An anesthesiologist

Dr. Clark is associate professor of anesthesiology, University of Arkansas School of Medicine, Little Rock.

+Pentothal, Abbott Laboratories
*Fluothane, Ayerst Laboratories
**Pontocaine, Winthrop Laboratories

*Demerol, Winthrop Laboratories
**Nembutal, Abbott Laboratories

Table 1.—Age Distribution in Years.

	Mean	Standard Deviation
Group 1	54.2	6.9
Group 2	42.3	11.5
Group 3	42.3	14.6

Table 2.—Patient Weight in Pounds.

	Mean	Standard Deviation
Group 1	166.0	20.1
Group 2	164.5	23.7
Group 3	164.4	22.1

Table 3.—Changes in Systolic Blood Pressure Pre-Anesthesia to Study Period, Mean Change in mm. Mercury.

	Mean	Standard Deviation
Group 1	—2.0	11.2
Group 2	+6.6	17.4
Group 3	—8.1	10.9

Table 4.—Blood Loss in Cubic Centimeters From Superficial Inguinal Incisions Under Different Anesthetic Agents.

	Mean	Range	Standard Deviation
Group 1	4.9	0.7-11.3	2.9
Group 2	7.7	1.0-25.7	6.2
Group 3	7.7	1.3-26.3	7.1

might use spinal or general anesthesia; a nurse anesthetist would use general anesthesia. Choice of anesthesia was made by concurrence of surgeon, patient, and anesthesia personnel.

Results

Twenty-three patients received spinal anesthesia (group 1), 30 received cyclopropane (group 2), and 39 halothane (group 3). (Tables 1, 2, 3, and 4). The mean loss for the spinal group was 4.9 cc.; for cyclopropane, 7.7 cc., and for halothane, 7.7 cc. The mean ages of the three groups were 54, 42, and 42 years. Systolic blood pressure during the test period changed from the pre-anesthesia level in most instances with 34% of the patients in group 1 exhibiting a rise, 52% a fall, and 14% no change. In group 2, the systolic pressure rose in 67% of the patients, fell in 26%, and did not change in 7%. The values of group 3 were 15%, 70%, and 15% respectively.

There was no significant difference* in blood loss between the three groups ($p=>.10$). There was no significant difference in weight between the three groups. There was a significant difference in age and in systolic change. Group 1 (-2.0 mm. systolic change) differed significantly from group 2 (+6.6 mm.), and group 2 differed significantly from group 3 (-8.1 mm.). There was no significant difference between groups 1 and 3 in systolic change.

Discussion

It was reassuring to find no real difference in loss among the three agents, especially with cyclopropane. This confirmed clinical impressions. It is obviously undesirable for the anesthetic to contribute to the patient's and surgeon's difficulty by increasing blood loss and it made little difference, from the standpoint of blood loss, which agent was used.

The study was designed to produce standard conditions for the three groups. We feel that we were successful in obtaining a homogenous patient group. A standard incision was used. The mean weights of the patients were very close—165 to 166 pounds, and this we believe would correlate with the thickness of the inguinal area, the most significant variable to present itself. The age distribution was within ten years, although the mean age of the patients receiving cyclopropane and halothane was lower than that of the spinal group. Perhaps the spinal group, being older, put more trust in the anesthesiologist, who, when given a choice, chooses spinal anesthesia.

It was hoped that three homogenous study groups would be obtained, as regards age and weight. In groups 2 and 3 we succeeded beyond our expectations.

The range of loss was small in the spinal group, but variable in the other two groups. Even so, the extremes of loss were uncommon. Even though there seemed to be a marked difference between the mean loss for spinal anesthesia (4.9 cc.) and cyclopropane (7.7 cc.), this difference was not statistically significant. Blood pressure fluctuated in an expected manner, frequently rising with cyclopropane. However, these changes in pressure did not correlate with blood loss.

*Differences between means mentioned in this report were not considered to be statistically significant unless p values were found to be less than 0.05 by the analysis of variance.

Summary

Three similar groups of patients were subjected to a standardized incision under three different anesthetics. Blood loss was measured, and found to be of no significant difference among them, despite an increase in blood pressure with cyclopropane.

We would like to express our appreciation to Mrs. Zelda Bowman, R.N., Operating Room Supervisor, Baptist Hospital, Pensacola, and her staff for their help in this study, and to James Meade, Ph.D., University of Arkansas Medical Center, for his statistical analysis of the data.

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Meniere's Disease

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From the time of Prosper Meniere's description of the disease that bears his name, there has been a lack of unanimity regarding findings necessary to diagnose this entity. It has become, for many practitioners, a wastebasket diagnosis for any dizzy patient in whom the cause is not completely obvious.

In most practices, dizziness is a very common complaint, and in Meniere's day it was evidently no different; however, he became aware of a particular type of "dizzy patient" whose dizziness was a true vertigo, episodic in nature, and associated with a unilateral hearing loss. He obtained autopsies in two patients with this type dizziness and found that their semi-circular canals and utricles were filled with a "plastic lymph".[1] This description led to many misinterpretations of the morphological findings until the time of Hallpike.[2]

Signs and Symptoms

A true Meniere's syndrome consists of (1) loss of hearing, (2) tinnitus, and (3) vertigo. A fourth finding has recently been added, that is, the symptom of fullness in the involved ear.[3]

The hearing loss is of a sensorineural type and may fluctuate widely, usually becoming worse with attacks, and improving in the interim. However, the hearing does not improve to the previous threshold and the long-term result is a severe sensorineural loss in the involved ear. The hearing loss may be present for months to years before the onset of vertigo. Tinnitus is persistent and fluctuates with the hearing loss. It is low pitched in nature as compared to the high pitched tinnitus which usually accompanies most sensorineural hearing losses. The tinnitus usually becomes much worse prior to and during an episode, and decreases with improvement of the patient.

Vertigo may prove more difficult to access in a history, since most people refer to this as dizziness. To a patient, dizziness may mean anything from a feeling of faintness to inebriation. However, with Meniere's disease, a true vertigo is present; i.e., there is a sensation of the body in motion or the surrounding objects in motion, as compared to a central vertigo which will most often be described as an unsteadiness or giddiness. The vertigo of Meniere's is episodic, lasting from minutes to hours, and is usually associated with nausea and vomiting. These episodes are feared by the patient because they may come on most unexpectedly and be of such severity that the patient is comfortable only when lying quietly with his uninvolved ear down.

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Pathology

As was mentioned before, Meniere based his syndrome on pathological findings, but it was not until Hallpike's observation on temporal bone specimens, as well as observations of other investigators who subsequently confirmed his findings, that Meniere's disease became classified on a pathologically sound basis.[2]

The pathological finding of Meniere's disease is that of a dilated endolymphatic space.

Meniere's disease thus has been established as a distinct clinical entity. Therefore, unless all the previously described findings are present, i. e., hearing loss, tinnitus, and true episodic vertigo, the diagnosis of Meniere's disease should not be made.

Diagnosis

To check the accuracy of the diagnosis in Jackson Memorial Hospital, we examined all the charts that had a discharge diagnosis of Meniere's disease and obtained some interesting findings. During the past five years 55 patients were discharged with a diagnosis of Meniere's disease. Of these patients, 23 neither had a history of hearing loss nor was the hearing tested. On 26 charts there was no mention of tinnitus; one patient did not even have a history of vertigo. In essence, of these 55 patients discharged as having Meniere's disease, 27 did not have the necessary criteria for this diagnosis.

Of the 27 patients, 17 were admitted to the private medical service, four to the neuromedical service, three to the neurosurgical service, one to private psychiatry, and one each to the private ENT service and to staff neuromedicine.

To further analyze the 28 that did have the findings necessary for this diagnosis, 21 were private patients. This is a significant and interesting occurrence, for in this teaching hospital we have a preponderance of staff patients. Eighteen of these 28 patients were females.

Differential Diagnosis

The differential diagnosis of Meniere's disease should include acoustic neuroma which will usually present as a unilateral hearing loss occasionally associated with vertigo. At times this diagnosis may prove difficult to rule out, but one should consider whether the hearing loss fluctuates as in Meniere's or gradually decreases as usually happens with an acoustic neuroma. The tuning forks will prove helpful in many cases. With Meniere's disease recruitment and diplacusis will be present, suggestive of cochlear involvement, whereas with an acoustic neuroma these findings may be present but would be the exception rather than the rule. Speech discrimination is usually much more affected with an acoustic neuroma than with Meniere's disease with a similar pure tone threshold. The physician presented with a difficult differential diagnosis should make use of an audiologist. For such specialized tests as the Bekesy, tone decay, SISI, and speech discrimination, scores may prove important in making a diagnosis. The vertigo of an acoustic neuroma may, in many cases, more resemble the central type of vertigo. Although vertigo may be episodic in nature with an acoustic neuroma it is much less apt to be than with Meniere's. Radiographic studies also are important to discern the two entities. Tomograms of the temporal bones to view the internal auditory meatus and, if the diagnosis remains in doubt, pantopaque studies would be in order.

Another entity which should be considered is viral labyrinthitis. This is usually of a sudden onset; however, the symptoms do not clear within a short while but may persist for days or weeks with a gradual improvement. A hearing loss in the affected ear is also associated and usually clears gradually with the vertigo.

A vestibular neuronitis is similar to labyrinthitis, but without a hearing loss.

A vascular occlusion will cause vertigo with a hearing loss. Symptoms come on suddenly and may or may not be associated with other neurological findings, depending upon how far peripherally the blood supply is occluded. With a peripheral vascular occlusion, the onset is sudden, persistent, and deafness is usually severe to complete.

Treatment

At this date, the cause of Meniere's disease is only hypothetical. The most widely accepted hypothesis is a vasomotor response in the vessels of the stria vascularis causing injury by hypoxia and increased vessel permeability.[4] However, there are many different theories and for each theory there are numerous forms of treatment. Many times the disease process seems to be made worse by an undue stress on the individual.[5]

Even though most attacks are self limited without treatment, effective treatment of the acute episode can be accomplished medically by the following drugs:

1. Atropine 1/75 gr. given subcutaneously
2. Benadryl or Dramamine intravenously
3. Histamine diphosphate 2.75 mg. in 250 ml. of 5% glucose, given intravenously

Medical treatment of the patient with continuing vertigo varies from physician to physician. The most widely used medications are combinations of tranquilizers, oral diuretics, vasodilators, and lipoflavinoids. These may be used in conjunction with a low salt diet.

The surgical treatment for Meniere's disease has as its main purpose the relief of vertigo and nausea. Many procedures have been devised in recent years which attempt to preserve serviceable hearing in a person who continues to have a fluctuating loss. These include sacculotomy, endolymphatic shunts, and ultrasound applied to the vestibular system. The sheer number and varying opinions as to results point out the fact that the ultimate procedure has not arrived. For the person with severe non-fluctuating hearing loss and discrimination of 40% or less and continuing episodes of vertigo, the treatment of choice is a total labyrinthectomy.[6] During the past five years in our institution, only nine have been performed. Six of these were on the left ear. Only two patients have had problems on follow-up; one developed Meniere's disease in the other ear and the second complained of extreme tinnitus in the operated ear.

Most patients with the diagnosis of Meniere's disease are treated as outpatients. Only those with a severe condition or difficult diagnostic problems are admitted, which accounts for the small number

of admissions in an institution the size of Jackson Memorial Hospital.

Much is now known about Meniere's disease, but the key that will eventually mold these bits of information into a pattern and complete knowledge remains to be found. It is a disease awaiting a cure.

Summary

A brief history and criteria for the diagnosis of Meniere's disease are presented and discussed.

The 55 patients discharged from Jackson Memorial Hospital during a five-year period are reviewed and analyzed. It was shown that an unqualified diagnosis of Meniere's disease was made in approximately 50% of the cases. This demonstrates the fact that Meniere's disease is not a common entity. Other possibilities should be ruled out before this diagnosis is made.

The current therapy is also discussed.

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Gram-Negative Infection Following Herniated Lumbar Intervertebral Disc Excision

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The introduction and widespread use of chemotherapeutic and antibiotic agents has resulted in profound changes in the number and the character of infections. A striking increase is being reported in the number of infections and fatalities due to Staphylococcus aureus and the gram-negative enterococci and coliform organism, notably Aerobacter, Proteus, and Pseudomonas.[1,2]

The clinical syndrome of bacteremia due to gram-negative bacilli has been recognized for more than 55 years. These patients change from relatively good health to prostration with chills and high fever within minutes or a few hours.[3]

In the patients reported here the change took place dramatically on the first or second postoperative day after the extraction of a herniated lumbar intervertebral disc. It is important to recognize this syndrome promptly—even before bacteriological data are available—so that the immediate institution of appropriate antibiotic therapy, based on the knowledge of the sensitivity of these organisms, can be accomplished and the wound immediately opened and drained.

It has been reported[4] that a chief determining factor in the survival of patients with gram-negative septicemia is the absence of coexisting severe or ultimately fatal illness. The patients reported here are healthy adults who despite stormy courses survived.

The administration of so-called "prophylactic" antibiotics is said to predispose to gram-negative infection, and steroid and immunosuppressive agents increase morbidity and mortality in these patients.[4,5]

Endotoxin shock which may develop in the course of gram-negative septicemia must be anticipated and, if it occurs, treated vigorously.[3,7]

Since our first encounter with these bacilli in 1965, we have had two other patients with this problem. We would be grateful never to see another.

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Report of Cases

Case 1.—A 27-year-old university student was examined on 9-10-65 with chief complaint of low back and disabling left lower extremity pain that was aggravated by motion, cough, and sneeze. He was annoyed by numbness of the last two toes of the left foot. The neurological examination was typical of S-1 nerve root compression. On 9-14-65, myelography confirmed the clinical impression and on the same day the herniated intervertebral disc between L-5 and S-1 was removed. The patient did quite well and was out of bed to the bathroom to void the evening of surgery. He had no sciatica. The next morning, however, he complained of "muscle spasms" in the low back. He had a shaking chill. His temperature rose by 4 p.m. to 102.6 F.

At this time we had no experience with gram-negative septicemia following disc extraction. Efforts were made to find the source of infection. The wound looked quite clean and was not tender. The chest x-ray was normal. Urinalysis was normal. A lumbar puncture made well proximal to the wound showed clear cerebrospinal fluid. On 9-16-65 his temperature rose to 106.6 F. He had shaking chills. Blood cultures were taken. He was given intravenous penicillin and steroids. To control his fever, which became the typical septic type with swings from 98 F to 105 F, the hypothermic blanket was used. Chloromycetin was given. On 9-21-65 the blood culture proved positive for E. coli, sensitive to kanamycin which was given. The wound was opened on the same day and E. coli pus was evacuated from between the deep fascia and the deep layer of the superficial fascia. He improved rapidly from this time on and was discharged from the hospital ambulatory on 11-2-65. The wound healed per secundam. No evidence of bone or interspace infection was determined. He is symptom free at the present time.

Case 2.—A 49-year-old woman had been operated upon elsewhere in 1963 for protruded intervertebral discs at the L-4, L-5 interspaces. She began to complain of low back and left lower extremity pain and disabled by it in spite of conservative treatment she was readmitted to the hospital. On 4-1-66, myelography revealed an extrinsic defect at L-5, S-1 on the left side. On 4-4-66 a large herniation of the L-5, S-1 disc was removed and the interspaces between the fourth and fifth lumbar and the fifth lumbar and first sacral vertebrae were exenterated. Forty-eight hours later she complained of low back ache; she vomited and had several severe shaking chills and temperature to 106.4 F. The wound was reopened on 4-7-66. Minimal pus was found beneath the deep fascia and cultures revealed a coliform organism and pseudomonas as well in the blood, spinal fluid and the wound. These organisms were sensitive to Coly-Mycin, Kantrex, streptomycin, and polymycin B. Appropriate antibiotics brought improvement. The wound healed by secondary intention. She was discharged from the hospital ambulatory on 6-4-66, two months following surgery. X-rays of the lumbar spine showed disc space infection and osteomyelitis at L-4, 5 and at L-5 S-1 (Fig. 1). She was seen at the office on 1-10-67. She did all her housework, caught lobsters at her place in the Florida Keys and had no discomfort. In September, 1968, she was asked to return for x-ray examination (Fig. 2). She had no complaints, did all her housework and felt fine. No neurological deficit was present.



Fig. 1.—Acute osteomyelitis.



Fig. 2.—Healed osteomyelitis.

Case 3.—A 72-year-old man had recurrent low back pain for many years. For two months prior to admission to the hospital he had severe pain in the right lower extremity from the knee to the ankle. This was made worse by walking. Traction for two weeks relieved the pain on two separate occasions but merely being up caused disabling recurrence. Myelography on 6-19-68 revealed an extrinsic defect at L-4, 5 on the right. The protruding disc was removed on 6-22-68. That evening the patient was out of bed, pain-free for the first time in several months. However, on 6-23-68 he had a slight back ache and his temperature rose to 103 F. On 6-24-68, despite a normal chest x-ray, clean looking wound, clear urine, no evidence of thrombophlebitis or stiffness of the neck, his temperature again rose to 103 F. Blood cultures were made and on 6-25-68 the wound was opened. Deep to the deep fascia a small quantity of thin pus was obtained. This yielded pseudomonas aeruginosa, sensitive to Chloromycetin and Coly-Mycin. Chloromycetin alone was used at first but because the fever persisted the wound was opened once more and Coly-Mycin was added to this treatment. He improved, ambulated, and was discharged from the hospital on 9-15-68. The x-rays (Fig. 3) show disc space infection and osteomyelitis. The wound healed by secondary intention. He has some slight dorsiflexor weakness of the right foot but carries out all of his usual activities.

Discussion

Postoperative sepsis results from the interaction of three variables—hospital environment, physician, and patient. The changes in prevalence and virulence of bacteria and the variations in host resistance produce new clinical sydromes which gradually permeate all levels of medical practice. In a lead article in the British Medical Journal in November, 1967[6] the ubiquity of Pseudomonas in particular and other gram-negative organisms in general is emphasized.

The three patients presented here were treated at one hospital. Each had been an inpatient for at least five days before surgery. These were the only gram-negative infected patients encountered by the one surgeon involved. The first was treated in 1965, the second in 1967, and the third in 1968. Hundreds of other patients have been operated upon by the same surgeon during these years.

It can be concluded that (a) the number of gram-negative infections is increasing; (b) gram-negative septicemia, a distinct and recognizable syndrome, can follow the "clean" excision of a herniated lumbar intervertebral disc.

Unrelenting vigilance in the maintenance of asepsis, proper preparation of the patient, and elimination of foci of infection in him and sources of infection in hospital personnel, correct surgical



Fig. 3.—Acute osteomyelitis.

scrubbing and technique must be the rule if infection rates are to match the lifetime average of 0.3% of Harvey Cushing.[8]

Although each patient with gram-negative infection following disc surgery does not conform in every detail to the previously described clinical syndrome, if it appears likely that such is the case, immediate treatment with the indicated antibiotics and wide wound opening to the appropriate depth should be accomplished.

Summary

A brief discussion is given of the prevalence of gram-negative bacterial infections.

Three patients who developed gram-negative bacterial infections after herniated lumbar intervertebral disc excision are presented.

A plea is made for that "old time" rigid insistence on the strictest asepsis in all of its minutiae for hospital environment, personnel, and practice.

Early recognition of the syndrome, prompt evacuation of the focus, and institution of appropriate antibiotic therapy are emphasized.

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Surgical Management of Diverticulitis

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No abdominal condition has presented me with a more difficult problem than a complication of diverticulitis. Indeed, this inflammatory lesion of the colon is a challenge to all of us. It will be seen more frequently as the average age of the population increases. This has increased 50% since the turn of the century, and most patients with diverticulitis are over 50 years of age.

Diverticulitis also presents a diagnostic challenge. Probably every day some patient is being treated for diverticulitis when he actually has carcinoma of the colon. Diverticulitis is a challenge to surgeons, because the surgical morbidity is still too high. Last but not least, patients still die from the complications of diverticulitis, and some of these deaths are due to an error in surgical judgment or technique.

Differential Diagnosis

Acute Appendicitis

Many patients with diverticulitis have been operated on because they were thought to have acute appendicitis. The lower part of the sigmoid colon often lies in the midline or even to the right of the midline, and fever, pain, and localized tenderness may closely simulate the clinical picture of appendicitis.

Ulcerative Colitis

In the majority of patients, this differential diagnosis can be made by proctoscopic examination. A history of diarrhea and rectal bleeding suggests ulcerative colitis, and the typical findings on proctoscopic examination will confirm this diagnosis.

Crohn's Disease or Granulomatous Ileocolitis

A history of diarrhea with little or no bleeding plus a narrowed terminal ileum on roentgenologic examination indicate Crohn's disease. A gastrointestinal x-ray study has been very reliable in the diagnosis of this condition.

Cancer

A diagnosis of diverticulitis should never be made until carcinoma has been excluded. The age and sex incidences for both conditions are the same. Diverticulitis involves the sigmoid in 95% of all patients. The sigmoid colon is also the commonest site for cancer of the colon. Rectal bleeding, a change in bowel habit, and abdominal discomfort are the cardinal signs of cancer of the colon. They are also common symptoms in patients with diverticulitis. In both conditions, digital examination of the rectum is likely to give negative results. Even on proctoscopic examination, the inflamed area is rarely visualized, whether it is caused by diverticulitis or an ulcerated carcinoma.

For years we have depended upon the barium enema study to make a differential diagnosis between diverticulitis and carcinoma. Unfortunately, in our experience, roentgenologic examination of the colon will not exclude carcinoma in 20% of patients with diverticulitis. X-ray evidence of a perforation of the colon suggests diverticulitis, since perforation is much less common in patients with carcinoma. If the defect in the sigmoid is 10 cm. or more in length, it also points to diverticulitis rather than carcinoma. The same is true if the barium enema examination demonstrates a colovesical fistula. A malignant condition can lead to a colovesical fistula, but it does so much less frequently than diverticulitis. Unfortunately, there are patients with diverticulitis whose barium enema film presents all the characteristic findings (including the "apple core" appearance) that are seen in patients with carcinoma. Even the apparent preservation of mucosal markings throughout the suspected area does not definitely rule out a malignant condition. In other patients the obstruction is so pronounced that the barium never outlines the defect in the sigmoid colon. We know that something has resulted in almost complete

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obstruction of the bowel at this point. It could be either a malignant lesion or diverticulitis.

When the roentgenologic film is equivocal, a careful review of the history may be helpful. Some years ago we reviewed the histories of 50 patients with carcinoma of the sigmoid and 50 patients who were operated on for diverticulitis of the sigmoid.[1] We could find only three clinical points that seemed to have statistical significance. Massive rectal bleeding was three times as common in patients with carcinoma as in patients with diverticulitis. The reverse was true for pain, particularly colic. The third factor was the length of time symptoms had been present. Most patients with diverticulitis had had symptoms for more than a year before operation. For the patients with carcinoma, it was rarely more than six or seven months. Surgeons know that frequently a definite diagnosis cannot be made even when the lesion is exposed at the time of operation. The extent of resection of the bowel and mesentery is different in these two conditions. Thus, any information that will provide at least a presumptive preoperative diagnosis is helpful.

Complications of Diverticulitis

Hemorrhage

If the bleeding is mild and frequent such as several times a week, it suggests carcinoma. Bleeding from diverticulitis is less common but may be severe. It can occur in patients who have never had clinical symptoms of diverticulitis. Only a small ulceration is required at the edge of a diverticulum to erode a colic artery. In most patients this bleeding will stop and these patients can be managed by conservative treatment. When it does not stop, these patients have to be operated on to prevent a fatal hemorrhage. At times the extent of the procedure presents a problem. If the diverticula are confined to the sigmoid colon, resection of this segment will probably control the bleeding. If the diverticula are scattered throughout the colon, cross clamping of the ascending, transverse, and descending colon may show which segment is the site of the bleeding. If it does not, subtotal colectomy with ileorectal anastomosis will be necessary. Patients have died from a secondary hemorrhage due to diverticulitis following a sigmoid resection.

Perforation

Free Perforation.—Free perforation with an open hole in the colon is a true surgical emergency. It is similar to the condition of a patient with a gunshot wound of the large bowel except that the perforation cannot be sutured safely. If it is high enough to be exteriorized, this is the best method of treatment. It can be performed quickly, further soiling of the peritoneal cavity is prevented, and restoration of intestinal continuity will present no problem at a later date. At times, however, the perforation is in the lower sigmoid colon and cannot be brought to the level of the skin without tension. If it is exteriorized under tension, it will inevitably retract, and this can lead to serious complications from wound infection and dehiscence. The best procedure under these circumstances is a Hartmann operation. The segment of colon with the perforation is removed, the proximal bowel is exteriorized as for a sigmoid colostomy, and the lower segment is closed. Restoration of continuity at a later date is not an easy procedure, but it can be performed. Fortunately, in our experience, free perforation with an open hole in the colon is a rarity.

Abscess.—The inflammatory process has usually been present for a sufficient length of time that when perforation occurs, an abscess results, rather than generalized peritonitis. These patients can be treated in one of three ways. First, conservative treatment may be given a trial. If the physical findings indicate that the perforation has been walled off, rest in bed, intravenous fluids, and antibiotics will often lead to a gradual and steady improvement in the patient's condition. When the inflammatory process has completely subsided, the decision can be made as to whether an elective resection is indicated or not. Second, if the patient has had several previous attacks, a primary resection may be carried out. If the inflammatory process is not extensive, resection with primary anastomosis can be performed with little risk. A good suction apparatus and an alert assistant can prevent contamination of the peritoneal cavity from a small abscess in the mesentery. If the anastomosis is made with uninflamed bowel, it should heal without trouble. Third, a transverse colostomy with or without drainage of the abscess is carried out to divert the fecal stream. If the abscess is large and the patient is elderly or obese, this staged operative management carries the least risk. It means, of course, that the patient will require one or two more operative procedures—but he will get well. It is in this type of patient that serious and at times fatal complications have developed after a primary resection.

Obstruction

Mild.—If the proximal colon is not greatly distended and has been adequately emptied of feces by the preoperative preparation, primary resection can be performed safely. Here again, the outcome will largely depend on the surgical judgment of the operator.

Pronounced.—There is little doubt that a transverse colostomy is the procedure of choice for these patients. When the colon is greatly dilated, it cannot be sutured with safety. A postoperative complication is likely if a primary anastomosis is done.

Postoperative Abscess,
Fistula or Obstruction

This complication as a type has increased in frequency in recent years. It is due to a leak at the suture line, usually following primary resection. These patients need prompt incision and drainage of the contaminated region and a diverting transverse colostomy. In patients with a spontaneous perforation of the colon, a diverting colostomy leads to complete resolution of the inflammatory process. Unfortunately, it often fails to do so when the abscess follows a sigmoid resection. The purulent draining sinus (frequently multiple) may persist for 12 months or longer with no sign of improvement. The surgical resection has changed the situation so that nature can no longer clear up the infection even with the help of a diverting colostomy. When it becomes obvious that the process in the left lower abdominal quadrant is not going to subside, it must be attacked directly. This presents a formidable problem to any surgeon. He is forced to work in a badly infected field with indurated tissues. He must avoid spreading the suppurative process to the rest of the peritoneal cavity, and if possible he must preserve a segment of rectum that can later be used for restoring intestinal continuity.

Technique

Staged Resection

The interval that should elapse between the diverting colostomy and resection of the sigmoid depends on the extent of the initial inflammatory process. If the process is well localized, resection can often be carried out in two to three months. If, however, there was a large abscess or extensive inflammation of the entire descending colon, it will require six months or more before the inflammation has completely subsided. The surgeon should keep in mind that if he operates too soon, while active inflammation is still present, he may lose the great advantage of the staged procedure. The interval between resection and closure of the colostomy stoma is governed largely by the operative condition at the time of resection. If no acute inflammation remains and the surgeon is completely satisfied with the anastomosis, the stoma may be closed at the same time. This should not be done, however, if any question remains about the integrity and normal healing of the anastomosis. A small leak at the suture line after a proximal colostomy will do no harm. If the colostomy stoma has been closed, a small leak can lead to serious trouble. The stoma can often be closed in ten days to two weeks. I prefer to send some patients home and have them return in six weeks for closure.

Primary Resection

As I have already indicated, the decision for or against primary resection depends largely upon the operative findings. In my opinion the essential requirement for a safe primary resection is that the anastomosis be made with normal colon. Frequently, this will mean mobilization of the splenic flexure. It requires a little more effort, but it makes the operation safer. Ordinarily, I do not use a complementary colostomy or drainage.

Morbidity

The high rate of morbidity that has long been associated with the surgical treatment of diverticulitis can be reduced in two ways. One is the elimination of operative procedures that experience has shown are unsatisfactory for the treatment of the complications of diverticulitis, such as incision and drainage of an abscess without a proximal colostomy. In the majority of patients, this will simply lead to a persistent colocutaneous fistula. A colostomy will still have to be performed before the fistulous region can be resected safely. Second, suture of a perforation or the site of a fistula is of little value. A leak with another abscess will usually occur, and these patients still have three more operative procedures to undergo. Third, closure of a colostomy stoma without resection is a great temptation, particularly for the surgeon who has had limited experience with this condition. After colostomy, the inflammatory process subsides, and the patient feels perfectly well. A barium enema examination may be normal, and there seems little reason not to close the colostomy stoma. Unfortunately, if this is

carried out, another complication will develop in the great majority of these patients, and they will be back where they started from.

It is obvious, however, that even if these unsatisfactory operative procedures are eliminated, the rate of morbidity will continue to be high if patients with diverticulitis are not operated on before complications develop. For this reason, many of us have been urging earlier surgery for years. I am referring to the patient who has persistent or recurrent attacks. Even one attack when it is associated with an abscess and an illness of two weeks or more is reason enough to consider an elective resection when the inflammatory process has subsided. The patient with a small perforation in whom the proximal bowel is not greatly dilated can be treated by a one-stage primary resection. A patient with a colovesical fistula and only a small amount of surrounding inflammatory reaction can also be treated safely by a one-stage primary resection. Earlier surgery for the patient with persistent or recurrent diverticulitis will reduce the morbidity of the surgical treatment of diverticulitis to a reasonable figure.

Mortality

When a patient dies as a result of a complication following a primary resection of the colon, the surgeon knows that he has probably made a tragic error in judgment. He cannot help but ask himself—would the patient have lived if the operation had been staged? We would all prefer to remove the disease and restore intestinal continuity in one operation. We must remember, however, that our primary responsibility to the patient is to see that he survives.

In the 20 years between 1947 and 1967 we operated on approximately 300 patients for diverticulitis at the Lahey Clinic. Of these patients, 61% had a primary one-stage resection with restoration of intestinal continuity. The overall mortality rate was 2.3%. The mortality rate for those patients having a primary resection was 1.6%. A careful review of the operative procedure suggests that two or more of the seven patients who died might have survived if a three-stage procedure had been carried out. There were 57 patients who did have a three-stage procedure. They were the oldest patients, the poorest risks, and they had the most serious complications yet there were no deaths in this group.

In the recent literature some reports have advocated a one-stage resection for all patients with diverticulitis, including those with abscess and peritonitis. It has been pointed out that this could be carried out with a mortality rate as low as 8%. I believe a mortality rate of 8% for the surgical treatment of diverticulitis is about eight times what it ought to be. In experienced hands and with good judgment in the choice of operative procedure, the mortality rate for the surgical treatment of diverticulitis should be less than 2%.

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Dr. Colcock, 605 Commonwealth Avenue, Boston, Massachusetts 02215.

editorial comment

Clyde M. Collins, M. D.

There are perplexing enigmas clouding diverticular disease of the colon. What is a diverticulum? Why is it formed? When can one be sure of the diagnosis if there is a paucity of positive clinical and x-ray findings? How can one decide on the best surgical treatment for the complications? In the minds of those who attended the scientific program jointly sponsored by the Florida Association of General Surgeons and the Florida Chapter of the American College of Surgeons, Dr. Colcock succinctly answered these questions in his presentation.

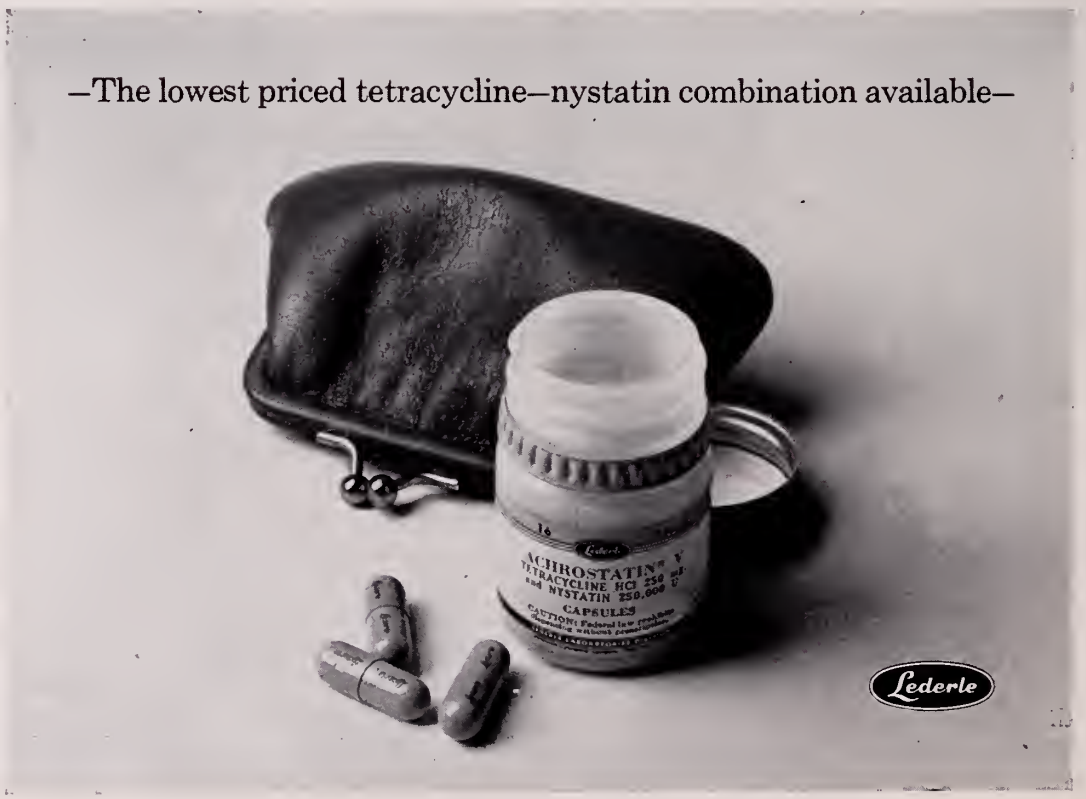
Although surveys of the surgical management of this disease are difficult to evaluate because of the many variants of the clinical picture, Dr. Colcock's mortality rate of 0% in 57 patients treated with a three-stage procedure compared to a mortality rate of 1.6% for those having a primary resection attests to the virtue of conservatism. Dr. Colcock concludes the differential diagnosis with three significant clinical points enabling the physician to differentiate carcinoma from diverticulitis when x-rays are equivocal. These are "massive bleeding was three times more com-

mon in patients with carcinoma" and the "reverse was true for pain," while patients whose symptoms had been present more than a year usually had diverticulitis. His treatment of uncontrollable hemorrhage from a colonic diverticulum ranges from cross clamping and local resection to near total colectomy, the latter being required when the site of bleeding is in doubt. Now with the increasing use of angiography, resection can be limited to the diverticulum which is the site of hemorrhage, often visualized if the diagnostic procedure is done at the time the patient is actively bleeding.

Dr. Colcock restates the belief of many surgeons that morbidity will continue high if patients with diverticulitis are not operated on before complications develop. This appears to be more justifiable in younger patients. While the medical treatment of acute diverticulitis is usually successful, nevertheless, recurrence is common though unpredictable and an initial primary resection and anastomosis during a quiescent phase seems justifiable. Of late, this concept has been challenged by questioning surgeons concerned about the lack of inflammatory disease in segments of colon resected for diverticular disease. Recent published evidence suggests that inflammatory changes in multiple diverticula or diffuse cellulitis of the colon are not common, but that in the majority of patients, perforation of a diverticulum is the source of the disease. According to some writers, colon resection for perforation of a single diverticulum is as consistent as resection of the cecum for acute appendicitis or its complications, and a more conservative approach is recommended. Before being commonly accepted this thought requires more discussion and more time to observe longer series of successfully treated patients.

From the patient's history, physical findings, laboratory data and x-ray studies, it is often difficult to differentiate diverticulosis from diverticulitis. A medical regimen is recommended for the former and for those faced with treatment of the latter, Dr. Colcock's paper is a sound, logical and helpful review.

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Florida Medical editorial

From the Editor

Franz Stewart

February Cover: Coronary Arteries

This is an x-ray of a human heart after injection of appropriate material into the coronary arteries. A large area of myocardium reveals a network, a mass of interlocking collateral vessels suggesting great vascularity and free communication between the smaller arteries. Old infarcts were demonstrated in this highly vascular area. A recent infarct had occurred in this same area.

Another large area of myocardium is seen in which this evidence of vascularity is lacking. Calcified occlusion is present in the coronary artery to this area. The lack of apparent vascularity in this area is not believed to be due to technical difference in the method of injection. This area of myocardium fails to show the evidence of infarction seen in the more vascular area in which infarcts were demonstrated.

The coronary arteries are more or less isolated in the area of muscle they serve and although collateral communications are present, these are small and may not represent effective flow channels. Anastomoses are found in areas surrounding healed infarcts and about occluded arteries. Distal arterial channels may be well filled below an old occluded vessel by means of free-flowing collaterals from a somewhat distant coronary artery. The demonstration of these collateral vessels and increased vascularity can be taken as good presumptive evidence of post-myocardial injury from coronary disease.

This forces the indulgence of some conjecture. Picture a child born with such a mat of intercommunicating vessels and with free-flowing back-up circulation from each coronary artery to the other. Later, as he grows older, should the process of segmental atherosclerosis successfully occlude one coronary artery, would the muscle damage of abrupt coronary occlusion be the same as that so often seen in his normal brother? Perhaps the back-up collaterals would furnish good measure of protection from massive infarction.

This protective mechanism has been shown to appear only after damage has occurred. If occlusion occurs slowly enough or intermittently enough these vessels develop in such profusion that great protection from large infarcts may develop. In such a vascular area, however it was produced, further areas of infarction are likely to be small additive insults producing a race between the two processes of increased muscle damage and improved circulation. When such increased distal vascularity develops it is remarkable how obstructed several major coronary arteries may become and yet the heart continue to function reasonably well.

To conjecture again, imagine two men at age 40 or 50. One man has developed considerable vascularity from long-standing coronary artery disease and the other has had no difficulty. There is a plaque in the anterior descending coronary in each man. A hemorrhage occurs under the plaque. Bad enough in each, but our conjecture leads us to expect the "normal" man to be more likely to suffer a large infarct!

As seen in the February cover picture it is clear that the distal vascularity produced by injury collects mainly around damaged areas and may leave other areas of the same heart less protected!

It is generally presumed that anoxia, or better, ischemia, furnishes the stimulus to the production of increased myocardial vascularity. This may be true, yet the nature of the stimulus is in some doubt. It must not be humoral or generally acting alone, because of the tendency to cluster about localized areas of myocardium. Ischemia alone would not appear to explain the increased vascularity which results from surgical attempts to answer this problem.

The coronary arteries are the focus of the problem. The unknown mechanism and stimulus to production of increased vascularity and collateral connections between the coronary arteries furnish the challenge of the next years in this field. In the meantime the view at present points to increased vascularity and collateral vessels not simply as evidence of disease, but as proof of protection. □



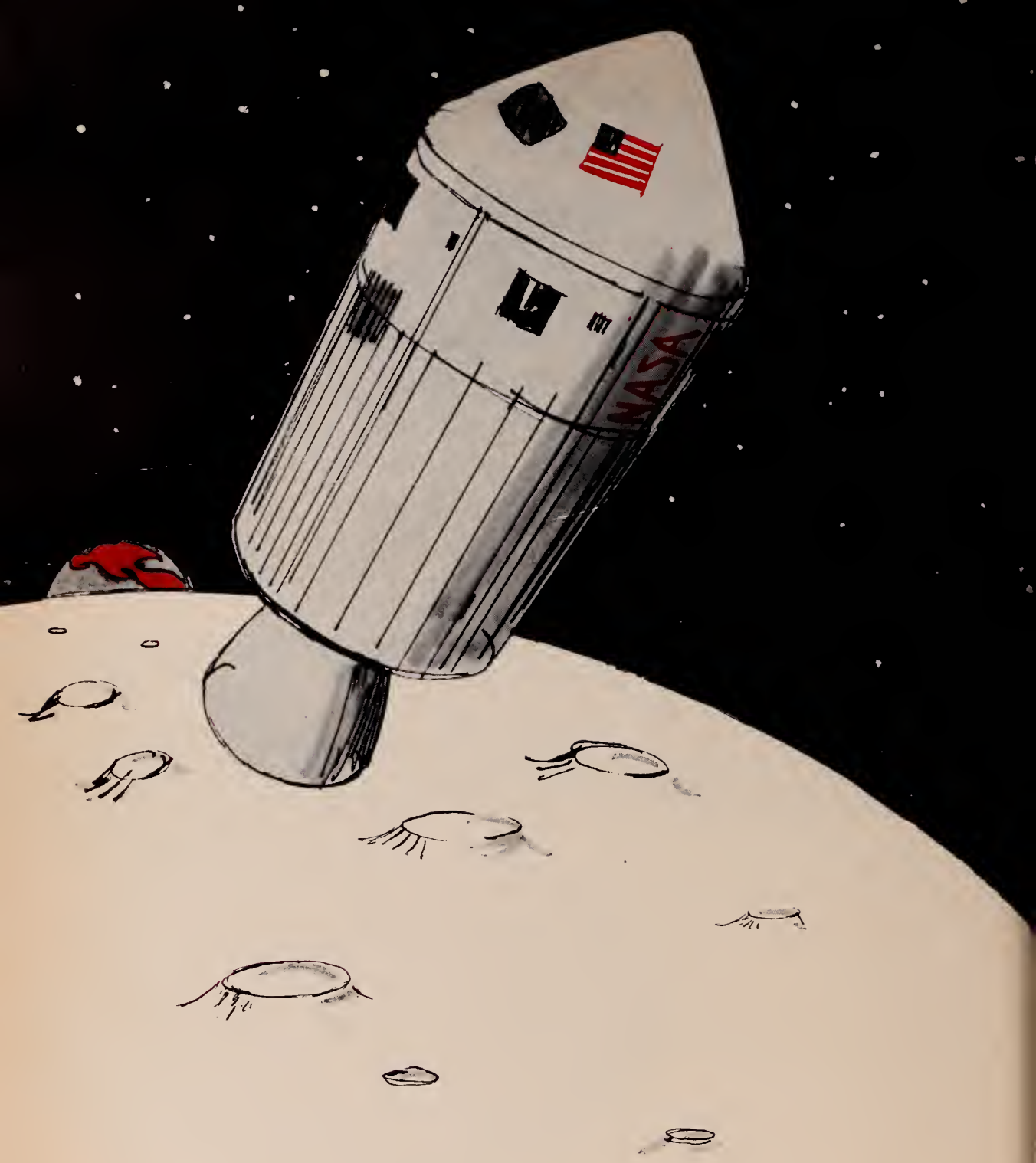
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Usual dosage is one tablet b.i.d.

Indications: Nutritional supplementation in conditions in which water-soluble vitamins are required prophylactically or therapeutically.

Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.

Dosage: 1 or 2 tablets daily, as indicated by clinical need.

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AMA 23rd National Conference on Rural Health

Francis T. Holland, M. D.

Why a conference on rural health? Why a Council on Rural Health? These are questions I am asked many times by my fellow physicians and even by some members of the American Farm Bureau Federation.

During the past few decades, especially since the end of World War II, our society has gradually changed from a rural society to an urban society, and many of us tend to forget that even at the present time 54,000,000 Americans live in rural areas. Many of these people are beginning to feel as though they are the forgotten Americans in that they do not have available to them many of the facilities that are available to the average American—particularly medical care. The affluent members of rural society seldom have difficulty obtaining adequate care, although at times it may not be available in case of emergencies as quickly as is desired. It is the rural poor that are the chief interest in rural health.

Another question that is frequently asked is, "Why can't my town or community get a resident physician of its own?" This question is asked much less often than it formerly was, and the answer is relatively simple. It can be answered by asking a question, "Why do you not have a supermarket or a shopping center?" Their answer is that they cannot support these, and then they realize that they likewise cannot support a doctor. Many times people have ingrained habits of securing medical care in a neighboring community, and were a resident physician to go there, the people would use him only as a first-aid man and continue to seek their general medical care from the community to which they were already going. In many places this pattern can be broken by a physician with a dedicated and missionary spirit, and many clinics with several physicians have developed in such circumstances, but several years were required to accomplish this.

Why do doctors practice in rural communities? The AMA Council on Rural Health has recently concluded a survey in which they found that 50 percent of doctors in towns of 2,500 population or less grew up in towns of like size, and this also held true for those in non-metropolitan areas of under 50,000. Therefore, we feel that if medical schools could be encouraged to take more applicants with a rural background, there would be a better chance of getting more physicians into rural areas.

The Council on Rural Health has gone about collecting a series of plans of health care provided in various parts of the country. There are 11 plans in operation in different sections of the country that are bringing improved medical care to isolated or semi-isolated communities. The University of Florida College of Medicine's project in Lafayette County is one of these. A pamphlet has recently been published by the Division of Health Services of the AMA which describes each of the plans.

The theme for the 23rd Conference is LET'S PUT *YOU* IN COMM-U-NITY HEALTH. The conference goals:

1. To develop effective planning methods for community health services.
2. To discuss effective ways for delivery of health services to all people in rural areas.
3. To assess the effect of environmental factors on health, safety and well-being of people living in rural areas.

Dr. Holland is immediate past chairman, Council on Rural Health, American Medical Association. He also is chairman of Florida's delegates to the AMA.

4. To more fully understand the socio-economics of health care delivery.
5. To review methods for efficient utilization of health resources.

The previous questions and many others will be answered for you if you attend the 23rd National Conference in Milwaukee at the Pfister Hotel and Tower, April 9 and 10, 1970. Plan now to attend, and if you are unable to, make your plans to attend the next conference, which will be held nearer home in Atlanta, March 26 and 27, 1971.

▶ Dr. Holland, 1307 Miccosukee Road, Tallahassee 32303.

Florida's Newest County Medical Society



The charter of Florida's newest county medical society, the Panhandle Medical Society, is accepted by its first president, Dr. Henry Knowles of Marianna (center). Making the presentation at a recent meeting of the new group was Dr. William M. C. Wilhoit of Pensacola (right), representing the FMA Board of Governors. At left is Dr. Glenn Padgett of Marianna, the society's secretary-treasurer. The Panhandle Medical Society is composed of the former Jackson-Calhoun, Gadsden-Liberty and Washington-Holmes medical societies.

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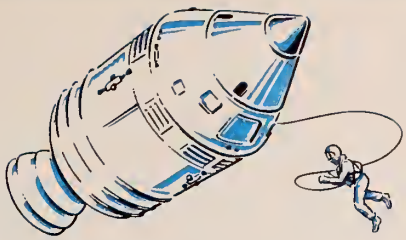
When Vitamin C is taken in ordinary tablet form, the rise in blood levels is rapid, but Vitamin C is as rapidly excreted and blood levels drop accordingly.

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CEVI-BID maintains optimal blood levels of Vitamin C, and avoids "peak and valley" effects of ordinary Vitamin C tablets.

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Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, 300 mg.; SODIUM ACID PHOSPHATE, 500 mg.

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

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This high-potency vitamin C and B-complex combination starts where diet stops

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Each Kapseal contains: ascorbic acid, 500 mg.; thiamine mononitrate, 25 mg.; riboflavin, 15 mg.; pyridoxine hydrochloride, 10 mg.; cyanocobalamin, 5 mcg.; niacinamide, 100 mg.; *dl*-panthenol, 20 mg.; Taka-Diastase® (Aspergillus oryzae enzymes), 2½ gr.



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soothing relief for hair-raising cough

Benylin®
EXPECTORANT

Each fluidounce contains: 80 mg. Benadryl® (diphenhydramine hydrochloride), Parke-Davis; 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol.
An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT *is the leading cough preparation of its kind.* BENYLIN EXPECTORANT *tends to inhibit cough reflex ...soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes* BENYLIN EXPECTORANT *easy to take.*
PRECAUTIONS: *Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with* BENYLIN EXPECTORANT *should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing* BENYLIN EXPECTORANT.
ADVERSE REACTIONS: *Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.*
PACKAGING: *Bottles of 4 oz., 16 oz., and 1 gal.*
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Owner Breaks Arm When Yacht Runs Aground

Schuyler, Oct. 31. Harry Waters of Covesville incurred a fractured arm ... acht ... ck a large rock ... tially capsized. The fire departme had to rescue Waters by small bo Damage to the yacht is estimated ...

Hasn't he skipper had enough excitement or one day?

r the patient who has been rough an accident, the worry d anxiety following the shap may actually heighten e perception of pain. This is ny there's a classic ¼ grain *dative* dose of phenobarbital Phenaphen with Codeine—take the nervous "edge" off, the rest of the formula can ntrol the pain more effectively.

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Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4) (warning: may be habit forming).

The compound analgesic that calms instead of caffeinates

Indications: Phenaphen with Codeine provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.



Florida Medical | comment

Florida's Coastal Hospitals Disaster Conscious and Prepared

William H. Hamlin

Hospitals along the coasts of Florida have good reason to be prepared for disasters. The staffs of many of them have provided care to an influx of patients during hurricanes and flooding and following tornadoes when an interruption in electrical power and the telephone system made isolation very real. Their preparations relate to specific problems, unlike other staffs which have never functioned under similar unusual conditions.

The interest in preparation for disaster appears to be sufficient among coastal hospitals; their need is coordination of services within the community and management techniques. They have readily accepted the Hospital Reserve Disaster Inventory Unit supplied without charge by the U. S. Public Health Service Division of Health Mobilization. Each unit contains drugs, surgical equipment, supplies, dressings and other items for 50 patients for about 30 days. These are placed with the regular inventory, used in day-to-day care of patients, and then replaced by the hospital, thus assuring a constant supply.

The Emergency Mobilization Program of the Division of Health, Florida Department of Health and Rehabilitative Services, offers assistance to the hospitals in more effectively coordinating services available in the community for a possible disaster. This is coupled with suggestions for improvement of disaster management techniques. The Program also provides information and consultation on all phases of preparedness, evaluation of disaster plans, and assistance with training programs and disaster exercise critiques.

In addition to the Hospital Reserve Disaster Inventory Unit, some hospitals have assumed responsibility for staffing and operating a Packaged Disaster Hospital stored in the community. Thus, the entire peninsular coast of Florida is lined with community hospitals which have one or both of these units (see map). The Health Mobilization Program provides special training materials for use in connection with the packaged hospitals. It also is in charge of distribution.

Mr. Hamlin is assigned by the U. S. Public Health Service as consultant to the emergency medical services program of the Division of Health, Florida Department of Health and Rehabilitative Services, Jacksonville.

▸ Mr. Hamlin, P. O. Box 210, Jacksonville 32201.

editorial comment

James L. Campbell, M.D.

The accompanying article should be of interest to every physician in Florida. Mr. Hamlin is completely familiar with the health mobilization program and other aspects of emergency medical preparedness throughout the state. While this article mentions only the coastal distribution of Packaged Disaster Hospitals, there are others strategically located throughout the central portion of the state.

Dr. Campbell is chairman, Committee on Emergency Medical Service, Florida Medical Association.

▸ Dr. Campbell, 1300 South Orange Avenue, Orlando 32806.

Shaded counties indicate location of Packaged Disaster Hospitals and/or hospitals which have a Hospital Reserve Disaster Inventory Unit.



West Coast Hospitals

Hospitals	*Location*
West Pasco	New Port Richey
All Children's	St. Petersburg
Mease	Dunedin
Metropolitan	Pinellas
Morton F. Plant	Clearwater
St. Anthony's	St. Petersburg
Centro Asturiano	Tampa
Centro Espanol	Tampa
Good Samaritan	Tampa
St. Joseph's	Tampa
South Fla. Baptist	Plant City
Tampa General	Tampa
Manatee Memorial	Bradenton
Memorial	Sarasota
St. Joseph	Port Charlotte
Medical Center	Punta Gorda
Lee Memorial	Ft. Myers
Naples Community	Naples

East Coast Hospitals

Humphreys Memorial	Fernandina
(The) Beaches	Jacksonville Beach
Flagler	St. Augustine
Daytona Beach General	Holly Hill
Halifax	Daytona Beach
Jess Parrish	Titusville
Wuesthoff Memorial	Rockledge
Brevard	Melbourne
Indian River Memorial	Vero Beach
Ft. Pierce Memorial	Ft. Pierce
Martin Memorial	Stuart
St. Mary's	W. Palm Beach
S.E. Fla. Tuberculosis	Lantana
Bethesda Memorial	Boynton Beach
Boca Raton	Boca Raton
North District	Pompano Beach
Broward General	Ft. Lauderdale
Memorial	Hollywood
Baptist	Miami
Doctors	Coral Gables
Hialeah	Hialeah
Jackson Memorial	Miami
Mercy	Miami
Mount Sinai	Miami Beach
North Miami	North Miami
North Shore	Miami
Osteopathic	Miami
Pan American	Miami
Parkway	North Miami
St. Francis	Miami Beach
Variety Children's	Miami
Victoria	Miami

The Woman's Auxiliary Can Help

Marion S. Gilliland
(Mrs. C. H.)

Since you practice medicine in the communities of Florida and are aware of health needs generally, you realize the value of educational programs and medical assistance.

In keeping with one of its purposes, "To assist the American Medical Association in its program for the advancement of medicine and public health," the national auxiliary has developed "Package Programs" to help focus public attention on current health needs and assist state and county auxiliaries plan and implement programs related to specific needs. A short summary of these programs follows. If you can use any of them, contact the county auxiliary members. They will furnish the program, assist in its presentation, or do the work. The public relations value is obvious.

The national auxiliary is anxious to have the programs widely used, but they must be sponsored and presented by and through an auxiliary or medical society, state or county, to obtain maximum benefit. To distribute them for information only fragments the value. Each package contains suggestions and material on how to plan and set up a program, how to attract the proper audience and present the subject to best advantage. Also included are a procedure guide, fact sheet, question and answer sheet for the audience, source list of recommended films, authoritative speech which may be presented by the program moderator, one or more pamphlets suggested for distribution, and a tally sheet to be filled in and mailed to the national auxiliary after the program has been completed. Good use is made of many pamphlets available from the American Medical Association.

Programs currently available include:

Alcohol.—Deals with use and abuse in today's society and necessity for adequate education and treatment programs. Recommended for showing are "To Your Health," a 16 mm. color, sound film which explores the reasons people drink and shows the effect of alcohol on the human body, and "A New Look at the Old Sauce," an animated cartoon filmstrip suitable for classroom use. Suggested literature includes "Manual on Alcoholism" intended for physicians but useful for laymen as well: "To Your Health," facts about symptoms, characteristics and treatment of alcoholism; "The Illness Called Alcoholism" and "How Teens Set the Stage for Alcoholism," for parents concerned about teenage drinking.

Drug Abuse.—Abuse of drugs from aspirin to heroin particularly among young people—a problem of growing concern. Intensive public education programs are urgently needed. This package includes a listing of a dozen films suitable for juvenile and adult audiences. Included are "Marijuana," recently purchased by your state auxiliary and available from it; "Narcotics—Why Not;" "LSD: Insight or Insanity," and "Bennies and Goofballs." Recommended booklets are "The Crutch that Cripples: Drug Dependence," and "Drugs of Abuse," which outline the problem, abusers, federal law and penalties involved in misuse of drugs. Also included is a reference chart listing names, medical uses, symptoms and effects of a variety of drugs.

Health Careers.—Information on two auxiliary-sponsored programs to bring to public attention the need for professional, trained and skilled personnel in health careers and allied services. Program A is designed for adults. Recommended is a slide presentation, "Physicists and Engineers, Also Part of Health Careers." Program B is essentially the same as A except narration is directed to students. Booklets suggested are "Where to Get Health Career Information" and "Horizons Unlimited."

Homemaker Service.—For presentation in communities having no homemaker service but needing one. Several new films are suggested, including "Homefires," which portrays the salient aspects of homemaker service. Suggested booklets include "How to Plan a Community Homemaker Service" and "How to Operate a Community

(Continued on page 47)

Mrs. Gilliland is president, Woman's Auxiliary to the Florida Medical Association.

A once-popular treatment for back pains was to have the seventh son of a seventh son stand or walk on the patient's back.





The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

For headache, a sovereign remedy was to wear a snakeskin round one's head.



A realistic approach to pain relief



Empirin®

Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains:
Codeine Phosphate gr. 1/2 (Warning—May be habit forming), Phenacetin gr. 2 1/2, Aspirin gr. 3 1/2, Caffeine gr. 1/2.

keeps the promise of pain relief

'B.W. & Co.' narcotic products are Class "B", and as such are available on oral prescription, where State law permits.

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Tuckahoe, N.Y.



Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of the alka formulation are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Persistent or severe dyspepsia may indicate peptic ulcer; perform upper gastrointestinal x-ray diagnostic tests if drug is continued. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with caution in the first trimester of pregnancy and in patients with thyroid disease.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. Patients should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions, black or tarry stools or other evidence of intestinal hemorrhage occur. Make complete blood counts at weekly intervals during early therapy and at 2-week intervals thereafter. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The more common are nausea and edema. Swelling of the ankles or face may b minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Drug rash occasionally occurs. If it does, promptly discontinue the drug. Agranulocytosis, exfoliative derma-

Sandy sails again!
After an arthritic flare-up.

His rheumatoid arthritis flared out of aspirin control. It meant weeks of pain, stiffness, swelling and tenderness...and a lot of sun and wind that somebody else took advantage of.

Next time, after aspirin, consider Butazolidin alka:
prompt anti-inflammatory effectiveness
short trial period
low maintenance dosage
usual dosage: 1 capsule q.i.d. initially, then 1 or 2 daily

Butazolidin® alka

100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings and contraindications. Read the prescribing information. It's summarized below.

is, Stevens-Johnson syndrome, ell's syndrome (toxic necrotizing idermolysis), or a generalized ergic reaction similar to serum ckness may occur and require ermanent withdrawal of medication. Agranulocytosis can occur ddenly in spite of regular, repeated ormal white counts. Stomatitis nd, rarely, salivary gland enlargement may require cessation of treatment. Such patients should not eceive subsequent courses of the rug. Vomiting, vertigo and languor ay occur. Leukemia and leukemoid eactions have been reported. While ot definitely attributable to the rug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, hypersensitivity angiitis, pericarditis and several cases of anuria, glomerulonephritis and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily, response is often achieved with 1 or 2 capsules daily. In selecting the appropriate dosage in any specific case, consideration should be given to the patient's weight, general health, age and any other factors influencing drug response. (B)46-070-C

For complete details, please see full prescribing information.

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If it doesn't work in a week, forget it.



symptoms of mixed anxiety-depression are rarely clear-cut..
but they are often a clear indication for

Mellaril®
(thioridazine)
25 mg. t.i.d.

effective in mixed anxiety-depression and in moderate to severe anxiety

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

SANDOZ PHARMACEUTICALS, HANOVER, N.J. SANDOZ 69-384

Homemaker Service." This program was produced jointly by the American Medical Association and its Woman's Auxiliary, and the National Council for Homemaker Services.

Immunization.—Designed to bring to public attention individual and community responsibilities in communicable disease control. Recommended films include "The Call of Duty," "The Careless Ones," and "Mission: Measles." Pamphlets are "Immunization," "Measles Vaccine," and "Memo to Parents About Immunization." The AMA Department of Health Education suggests that this program tie in with local medical society participation in the AMA's current campaign to promote immunization.

Mental Health of Children.—Designed to stimulate concern for emotional well-being of children. The film, "The Time for Growing," tells how early signs of emotional difficulties may be detected. Booklets suggested are "Growing and Learning," "Early School Years," and "I Won't, I Won't."

Sex Education.—Information and materials to enable auxiliaries and societies to interest their communities in working with schools in development of a sex education curriculum. Recommended are "Sex Education—U. S. A.," a color filmstrip, and "Parent to Child About Sex," a 16 mm. color, sound film. Suggested booklets include "Parents' Responsibility," "Beginnings of Sex Education," and "The Home, the School and Sex Education."

Teenage Venereal Disease.—Provides information for two programs on this national health menace. One is for adult representatives of community public and voluntary agencies, the other for youth or school groups. Two films are recommended: "Dance Little Children" describes a syphilis outbreak among teenagers, and "A Quarter Million Teenagers" shows the ravages of syphilis and gonorrhea. Pamphlets suggested are "Venereal Disease Is Still a World Problem," "Why the Rise in Teenage Gonorrhea?" and "Strictly for Teenagers."

The Block Mother Plan.—Designed to interest PTA's and other groups in setting up a system to protect children going to and from school. Included is a speech, a pamphlet, "The Block Mother Plan," and samples of a news release and the orange and white sign designating a "Block Mother."

Youth Health and Fitness.—Information and materials for stimulating community understanding of the value of health education in the physical, mental and social well-being of youth. The film, "School Health in Action," shows in classroom situations the learning opportunities in health, student health problems observed by teachers and how they affect pupil-school adjustment. Recommended are a pamphlet, "Why Health Education?" and a reprint of an article from the May 1966 issue of *Today's Health,* "What Our Kids Don't Know About Health."

Vision and Hearing Screening for Pre-Schoolers.—This one was developed and used very successfully by the Minnesota auxiliary. It has been made available to other states through the national auxiliary. Included is a procedure guide for setting up such a program.

One Dozen Days.—The realm of public affairs, and suggested programs on political activity, constitutional amendments, bond issues and other local projects, candidate support, school elections, pollution control and community health. Also included is a list of draft bills approved by the AMA Council on Legislative Activities and Board of Trustees, pamphlets on "Helping Your Candidate Win," "Managing the Campaign for the House of Representatives," "How the Opinion Maker Makes Opinion in Politics," "DIAL," "AMPAC Offers You the IMPACT of an Effective, Coordinated, National Political Action Program," and a series of eight AMPAC pamphlets in a political education series.

Baby-Sitter Safety Training.—A product of our own Florida auxiliary, originating in Alachua County six years ago. We won recognition from the national auxiliary and the National Safety Council for this one. The package includes a procedure guide for setting up the course, suggested program materials, manual for organizing, sample certificate for completion of course, and stresses avoidance of legal liabilities by not certifying competence of trainees and by not establishing baby-sitter bureaus.

These programs are geared to good public relations through effective and needed public service. If your county auxiliary needs assistance in setting up or carrying them out, or any of its other programs, they have but to ask. That's what we are here for. The state and national auxiliaries serve the needs of the counties and the auxiliaries at all levels exist only to be of service to the medical societies at all levels.

▶ Mrs. Gilliland, 324 N. W. 24th Street, Gainesville 32601.

Life? Vest

Donald L. Howie, M.D.

Drowning occurs with many antecedents. There are the few apparently good swimmers who get into unexplained difficulties. Then there are the drunks, victims of aircraft failures, epileptics, scuba divers, the overconfident and children. Most die by submersion. There is another class in which submersion in the usual sense is not a factor.

During the build-up to a hurricane, a man and his wife attempted to take a fairly large boat to safer anchorage. They apparently failed to start early enough and did not reach their destination. The boat sank. Both husband and wife left the boat in proper life jackets which were not defective. These were still on the bodies when they were recovered. It had not been unusually cold and injuries were not evident. Yet the findings were characteristic of salt water drowning with excess saline in the left ventricle.

About two years later while gale warning flags were snapping in the vigorous wind, a woman and her boyfriend went out into a rough channel in a ten foot Jon boat. The boat capsized. Again, both had on life jackets. The woman supposedly remained conscious and afloat but, when the two were plucked from the water about an hour after the accident, she was apparently dead and could not be revived. Water temperature was in the mid-to upper 60's. The woman had no significant systemic disease. Despite reports to the contrary, she did not have an elevated blood alcohol. Left heart chlorides and sodium were both elevated. There was pulmonary edema and the usual water within the stomach. She had drowned.

Under conditions of high wind, the spray a few inches above the water can be quite intense. The attempt to avoid it must be exceedingly fatiguing and inhaled air must have very high contents of water and salts. Fatigue obviously enters into such deaths. It is, of course, likely that intermittent submersion actually supervenes. It may be that sufficient spray is inhaled to effect electrolyte changes. This obviously occurred at least terminally in the second case.

Coast Guard approved life jackets under conditions of high wind and spray solve only the superficial problem of staying at the surface of the water. Some additional form of equipment is needed to allow water-free breathing when the boundary between air and water is a gradual transition.

▶ Dr. Howie, Mound Park Hospital, St. Petersburg 33731.

Our Mail

Comment on Scientific Article

Dear Editor:

It is gratifying to see a medical article ("Surgical Blood Loss Associated With Various Anesthetics," by Richard Clark, M. D. and C. Elmer Davis, M. D., appearing elsewhere in this issue) which uses ordinary equipment and simplicity to answer a real question. The literature is far too full of studies on isolated myocardial strips from virgin white rabbits, at least for the clinician whose Lagomorphan encounters are minimal.

Anesthesiologists will be forever in debt to these Arkansans for presenting them with a solid rejoinder to the perennial surgeon's inquiry, "What's being given to make this patient bleed?" "It doesn't matter!", one may now reply, enigmatic to all save FMA Journal readers.

James D. Beeson, M.D.
Jacksonville

A Letter from our Correspondent in Pakistan

Dr. Alda G. Holliday, who formerly practiced obstetrics and gynecology in Orlando and Jacksonville, has thoughtfully furnished the following account of conditions in the troubled nation of Pakistan, where she has been on duty with the State Department since early 1968. Readers may communicate with Dr. Holliday care of I. D./Rawalpindi, Department of State, Washington, D. C. 20521.—Ed.

Dear Editor:

Pakistan is a country which was formed from the Muslim (Islamic) population of British India when the Asian subcontinent gained its independence. The Hindu population became present-day India; at the time of partition and independence in 1947 there was mass migration on religious basis and civil war; I have read in the U. S. that 500,000 people were killed, but people who were here at the time estimate the deaths at 12-15 million. My cook-bearer, who lived in Lahore only 18 miles from the Indian border, says that every night there was a train sent from India to Lahore loaded with Muslim bodies and a train the other direction loaded with Hindu bodies (a book written about this is called "Train to Pakistan"). Since that time it seems that the foreign policy of each country is mostly based on hatred for the other country. In 1965 this erupted into an 18-day war with a cease-fire effected by the Tashkent Agreement. The war was for possession of Jammu-Kashmir which is held by India although the majority population is Muslim.

Pakistan is divided into two provinces, West Pakistan of 300,000 square miles with about 55,000,000 people, and East Pakistan of 60,000 square miles and about 65,000,000 people. The latter is one of the most densely populated agricultural areas in the world. The two provinces have almost nothing in common except the religion. People of West Pakistan are Pathans, Baluchi and Sindhis for the most part and are tall and light brown in color. The Bengalis of East Pakistan are short and dark with a culture common to the state of West Bengal in India (Calcutta). Bengali is spoken in East Pakistan but West Pakistan has about four major regional languages, with Urdu being the most common and the language of the government, in addition to English. To add to the confusion the two provinces are separated by 1,500 miles of hostile India. West Pakistan is mostly mountains (west and north), plains (center, including part of the Punjab, the traditional breadbasket of the sub-continent), and desert in the central and southern portion. East Pakistan lies in the delta of the Ganges and Brahmaputra Rivers and each summer takes the brunt of the monsoons which sweep around the tip of India from the Arabian Sea. West Pakistan primarily raises and eats wheat but East Pakistan is rice country.

The U. S. has two principal health projects in Pakistan: Malaria Eradication Program, with World Health Organization and to a lesser extent UNICEF assisting in it; and Family Planning, with other principal assistance agencies being SIDA (Swedish International Development Authority), Ford Foundation, which helps support research projects by The Johns Hopkins University in Lahore and the University of California in Dacca; the Population Council, and UNICEF, although its primary interest is maternal and child health. Also assisting to a lesser extent are or have been the Netherlands, United Kingdom, and CENTO (Central Treaty Organization, composed of Pakistan, Iran and Turkey as regional members, and the U. S. and U. K. as non-regional members. Although many people think of CENTO as a purely military organization, they also are active in engineering, agriculture, education, etc.).

The Pakistan Family Planning Program is one of the best-known and largest in the world. It was started by the government in 1962 in the Ministry of Health, Labour, and Social Welfare. Not much was accomplished in the next three years and in 1965, at the start of the present third Five Year Plan it became a semi-autonomous organization headed by a Family Planning Council with the Minister of Health as chairman and a Joint Secretary of the government as Secretary. A budget of 284,000,000 Rs. (one rupee equals about 21 cents, or $1.00 equals 4.76 rupees) was allocated for the five years. The goal of the program was to reduce the birth rate from about 50 per thousand population to 40, while the death rate was expected to drop from 20 per thousand to 15, thereby reducing the population growth

rate from 3% to 2.5%. The principal methods of accomplishing this were planned to be 3,000,000 IUD insertions in five years, 90,000 vasectomies, and such things as contraceptive tablets, foams, liquids, jellies, creams and diaphragms and condoms. Oral pills were not included on the theory that a population that is about 85% illiterate could not and would not use them.

Up to January 1, 1969, about 2,000,000 IUD's had been inserted, 400,000,000 units (individual applications) of conventional type contraceptives distributed and, much to everyone's surprise, 600,000 surgical sterilizations had been done, almost all vasectomies and almost all in East Pakistan. The program at one time had nearly 100,000 employees although only about 3,000 were full-time; the remainder were part-time doctors, part-time dais (traditional midwives) and agents for sale of conventional contraceptives.

The program reached its peak of achievement in October, 1968; that same month there was an assassination attempt on General Ayub Khan, the president of the country, and this was followed by civil disorders, demonstrations and riots which increased in intensity through March, 1969. During this time family planning became a target for a great deal of criticism and even destruction, probably largely because President Ayub had backed the program and almost never made a speech without promoting it. During January, February and March of 1969 we lived a great deal of the time under curfew; our office was just across the street from the Provincial Assembly building in Lahore, so we had a ringside seat when we were at work, even though the building was barricaded and police and soldiers were posted in the parking lot. Fortunately for us the demonstrations never seemed to be directed toward the foreign community. Fortunately also, almost all Americans lived in an area called Gulberg which was separated from the rest of the city by a canal and was easily sealed off so that we could move between our own houses and the golf course rather freely. Conditions were worse in East Pakistan than in most places in West Pakistan.

Pakistan had an international family planning conference in Dacca, East Pakistan, January 28 to February 4, 1969; there was considerable talk about postponing or cancelling it and we actually delayed our trip there by one day because of the trouble. However, many people were enroute from all over the world so it was decided to hold it on schedule. The conference and all foreigners were housed in the Intercontinental Hotel in Dacca and the Pakistanis attending stayed in a hotel a block away and had curfew passes to get to the Intercontinental. Late in the week the curfew was lifted for several hours during the daytime so we were able to get out and do some sightseeing and shopping but most of us stayed away from the old city and the university section. Several trips were planned for the weekend out of Dacca for the foreigners in attendance and all but two of these had to be cancelled. We were fortunate that four of us from Lahore, plus an American doctor from Vietnam whom we "adopted," had signed for the trip to Cox's Bazaar which went on schedule. Cox's Bazaar is the last city (?) of any size south in East Pakistan and is on the Bay of Bengal. It has the longest uninterrupted beach (so they say) in the world, about 85 miles, and is really lovely since it is practically untouched by humans except the few local fishermen. It is the only time I ever looked up on a beach and saw an elephant coming toward me; fortunately he was tame and not too big.

On March 28, 1969, President Ayub Khan resigned his office and martial law was declared by General Yahyha Khan, commander-in-chief of the army, who soon after became president. The riots and demonstrations completely stopped during the 30 minutes General Ayub took to make his speech. Gradually since then some political agitation has started again and just recently General Yahyha announced that elections were to be held October 5, 1970, and a new constitution drafted. In the meantime the country has lost millions of rupees and considerable foreign exchange as a result of the civil disorders, strikes and other troubles. There was a general reshuffling of the government at high levels in April and May of 1969; during that time the Family Planning Council got a new Joint Secretary and the government is not associating itself as closely with the program, so that it has not regained all its previous momentum.

With all this going on, and the fourth Five Year Plan being drafted to start July, 1970, it is difficult to predict exactly what the future holds for family planning in Pakistan, although the government has indicated by a fairly generous budget for the next five years (600,000,000 Rs.) that it intends to support it, even if silently. Of course, the budget figure is not final, because the National Economic Council has not approved it.

Alda G. Holliday, M.D.
Rawalpindi, Pakistan

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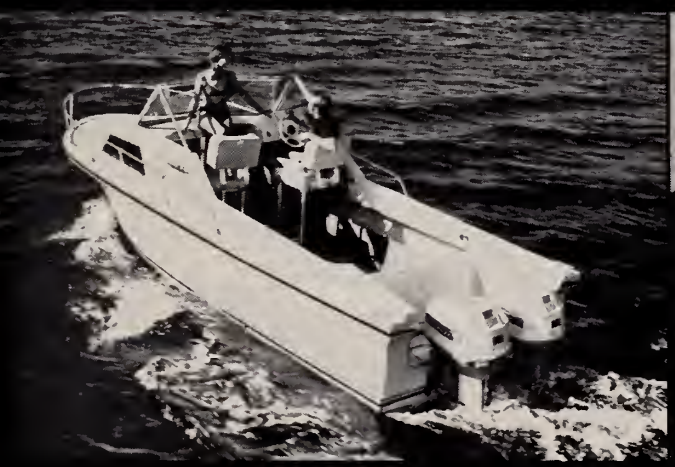


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15-20 Treatment of Common Medical Disorders, Sheraton-Four Ambassadors Hotel, Miami. For information contact: J. Bocles, M. D., Dept. of Medicine, University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

27-28 Seminar on Hypertension, J. Hillis Miller Health Center, Gainesville. For information contact: Div. of Postgraduate Education, J. Hillis Miller Health Center, Box 758, Gainesville 32601.

MARCH

6 Leukemia-Lymphoma Seminar for Physicians, Sheraton Hotel, Tampa. For information contact: J. N. Patterson, M. D., Chairman, American Cancer Soc., Fla. Div., 2909 Bay-to-Bay Blvd., Tampa 33609.

11-14 Second Teaching Conference in Clinical Cardiology, Sheraton-Four Ambassadors Hotel, Miami. For information contact: Michael S. Gordon, M. D., Jackson Memorial Hospital, Miami 33136.

14 Advances in Management of Coronary Artery Disease, Watson Clinic Medical Symposium, Watson Clinic, Lakeland. For information contact: John F. Flanagan, M. D., Watson Clinic, Lakeland 33802.

19-20 Cardiology Symposium, Orange Memorial Hospital, Orlando. For information contact: Clarence M. Gilbert, M. D., 215 E. Jackson St., Orlando 32801.

25-28 Trends in Clinical Radiology, Fontainebleau Hotel, Miami Beach. For information contact: Manuel Viamonte Jr., M. D., Box 875, Biscayne Annex, Miami 33152.

27-28 "A Day of Cardiac Pathology With Jesse E. Edwards, M. D.," University of Florida Gainesville. For information contact Div. of Postgraduate Education, J. Hillis Miller Health Center, Box 758, Gainesville 32601.

APRIL

16-18 Pulse of Laboratory Medicine, Tides Hotel and Bath Club, Redington Beach (St. Petersburg). For information contact: M. A. Barton, M. D., 701 - 6th St., S., St. Petersburg 33701.

25 Fourth Annual Seminar on Diagnosis and Management of Cancer, Port-O-Call Resort Inn Tierra Verde, St. Petersburg. For information contact: John Carbonneau, 2909 Bay-To-Bay Boulevard, Tampa 33609.

MAY

13-16 Greater Miami Pediatric Society Seminar, Jackson Memorial Hospital, Miami. For information contact: Retha Schiess, M. D., 7001 Galloway Rd., Miami 33143.

DECEMBER

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information contact: Arthur Gosselin, M. D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings in Florida

MARCH

2-4 Clinical Concepts in Infectious Disease, American College of Physicians, J. Hillis Miller Health Center, Gainesville

14-18 American Society of Abdominal Surgeons Clinical Congress, Deauville Hotel, Miami Beach

19-24 American Dermatological Association, Boca Raton Hotel, Boca Raton

APRIL

12-16 American Proctologic Society, Diplomat Hotel, Hollywood

19-20 American Otological Society, Hollywood Beach Hotel, Hollywood

20-21 American Broncho-Esophagological Association, Hollywood Beach Hotel, Hollywood

21-23 American Laryngological, Rhinological and Otological Society, Hollywood Beach Hotel, Hollywood

23-24 American Society for Head and Neck Surgery, Hollywood Beach Hotel, Hollywood

24-25 American Laryngological Association, Hollywood Beach Hotel, Hollywood

24-25 American Academy of Facial Plastic and Reconstructive Surgery, Hollywood Beach Hotel, Hollywood Beach

27-May 2 American Academy of Neurology, Americana Hotel, Miami Beach

SEPTEMBER

29-Oct. 2 American Roentgen Ray Society, Deauville Hotel, Miami Beach

OCTOBER

2-4 Southeastern Allergy Association, Colony Beach Club Hotel, Long Boat Key, Sarasota

NOVEMBER

3-8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton

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1. Gordon, E.E. and Haas, A., Industr. Med. Surg. 28:217, May, 1959.

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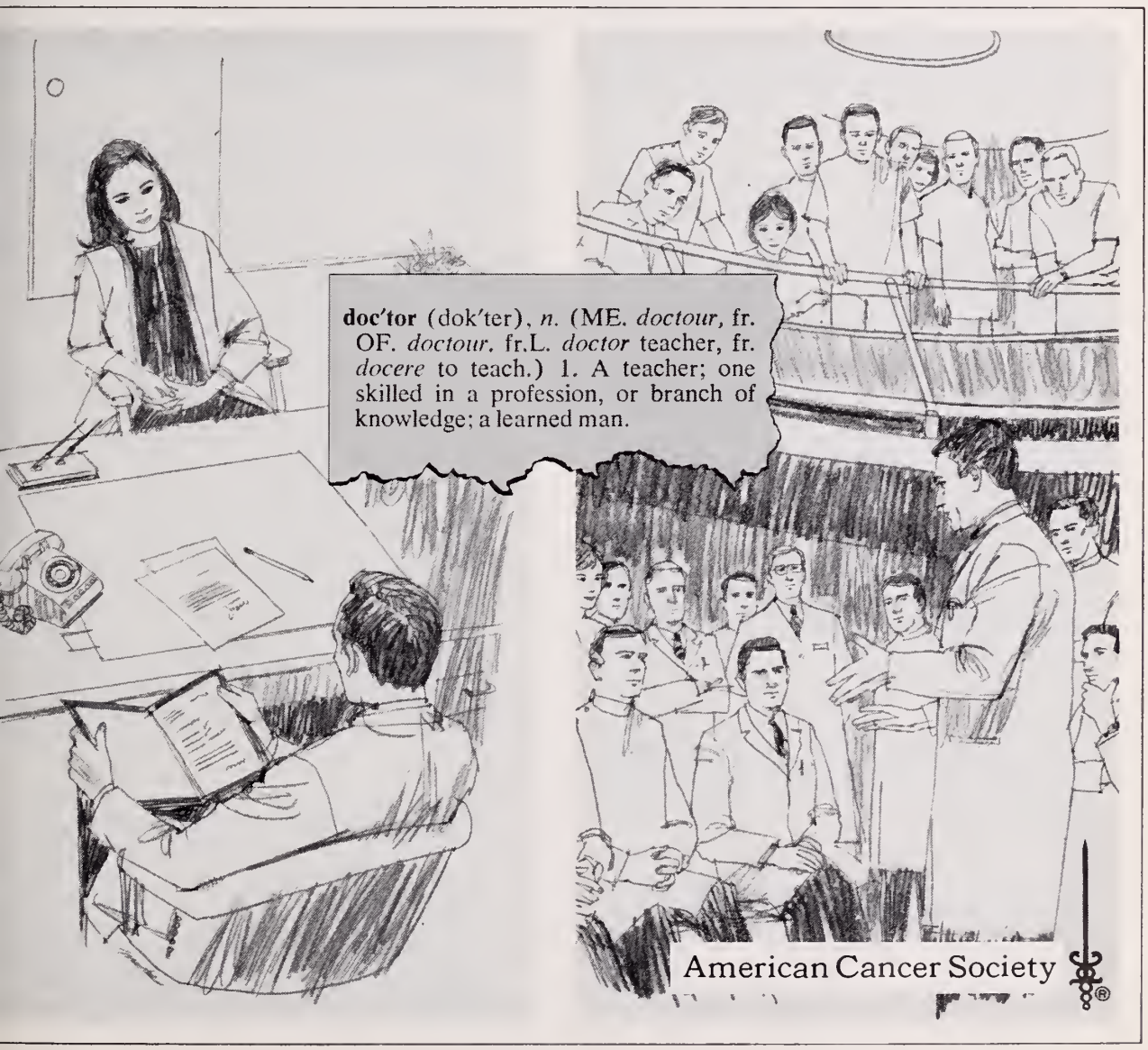
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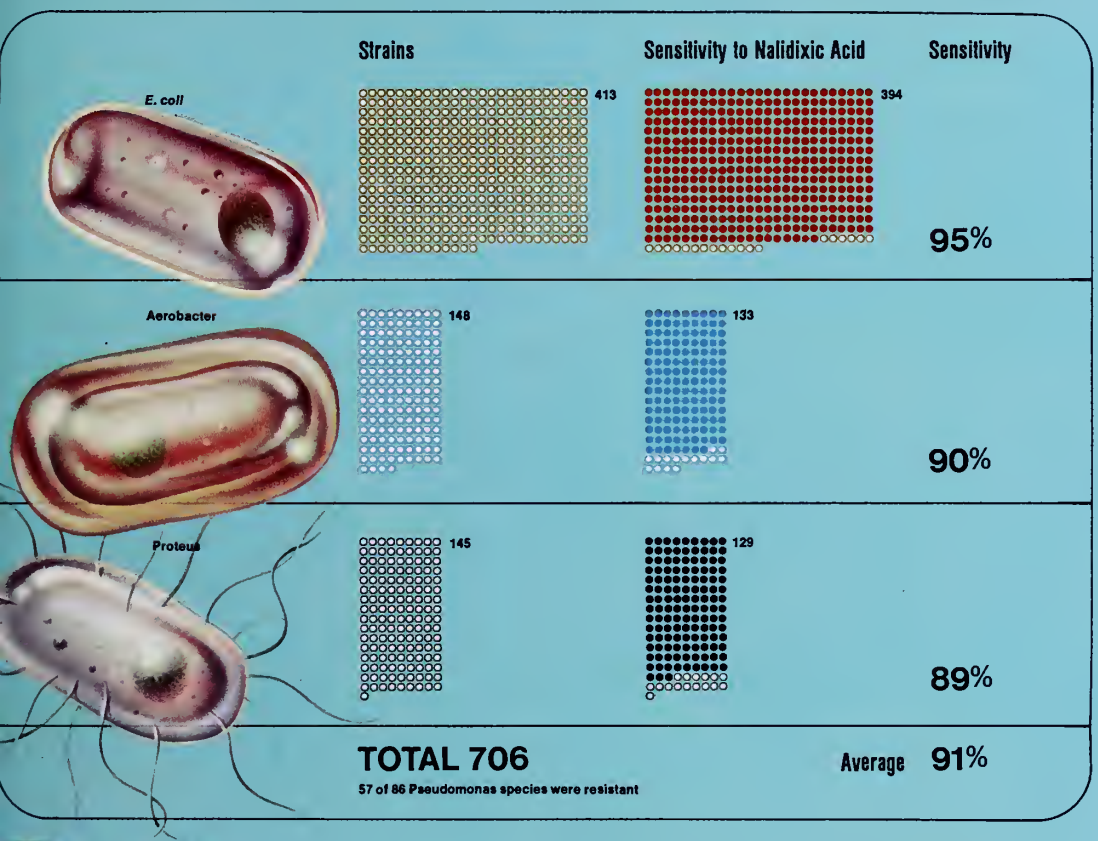
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References: 1. Reimann-Hunziker, R. and Reimann-Hunziker, G. J.: *Praxis* 53:15, Jan. 9, 1964. 2. Sanford, J. P.: *Med. Times* 96:715, July 1968. 3. Reese, L.: *Canad. M. A. J.* 92:394-397, Feb. 20, 1965.

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Warning: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

Precautions: Although prolonged treatment with Cybis has been generally well tolerated, as with all new drugs it is advisable to carry out blood, renal, and liver function tests periodically if treatment is continued for more than one or two weeks. The dosage recommended for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. **It should be used with caution in patients with liver disease, epilepsy, or severe cerebral arteriosclerosis, and in patients in whom kidney function is severely impaired.** Patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving Cybis and, if a photosensitivity reaction occurs, therapy should be discontinued.

During treatment microorganisms may develop resistance to this drug. Resistant bacteria, not previously present or identified, may emerge. Cultures should be taken and bacterial sensitivity tests made periodically, particularly if the clinical response is unsatisfactory or if a relapse occurs. Should resistance develop, other specific chemotherapy should be instituted; no cross resistance has been observed. If new strains of bacteria that are not sensitive emerge, other effective antibacterial agents may be added. When Benedict's or Fehling's solutions or Clinitest® Reagent Tablets are used to test the urine of patients taking Cybis, a false-positive reaction for glucose may be obtained due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (using, for example, Clinistix® Reagent Strips or Tes-Tape®) does not give a false-positive reaction to Cybis glucuronide.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances: less frequently, sleepiness, drowsiness, weakness, headache, dizziness and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed surfaces, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache have been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the latter generally in patients with possible predisposing factors, and both usually associated with excessive dosage) have been recorded in rare instances.

Dosage and administration: *Adults*— Four Gm. dail by mouth (2 tablets of 500 mg. four times daily) for on to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. dai (1 tablet of 500 mg. four times daily). *Children*— According to age and weight: approximately *25 mg. per pound* of body weight per day, administered in divided doses.

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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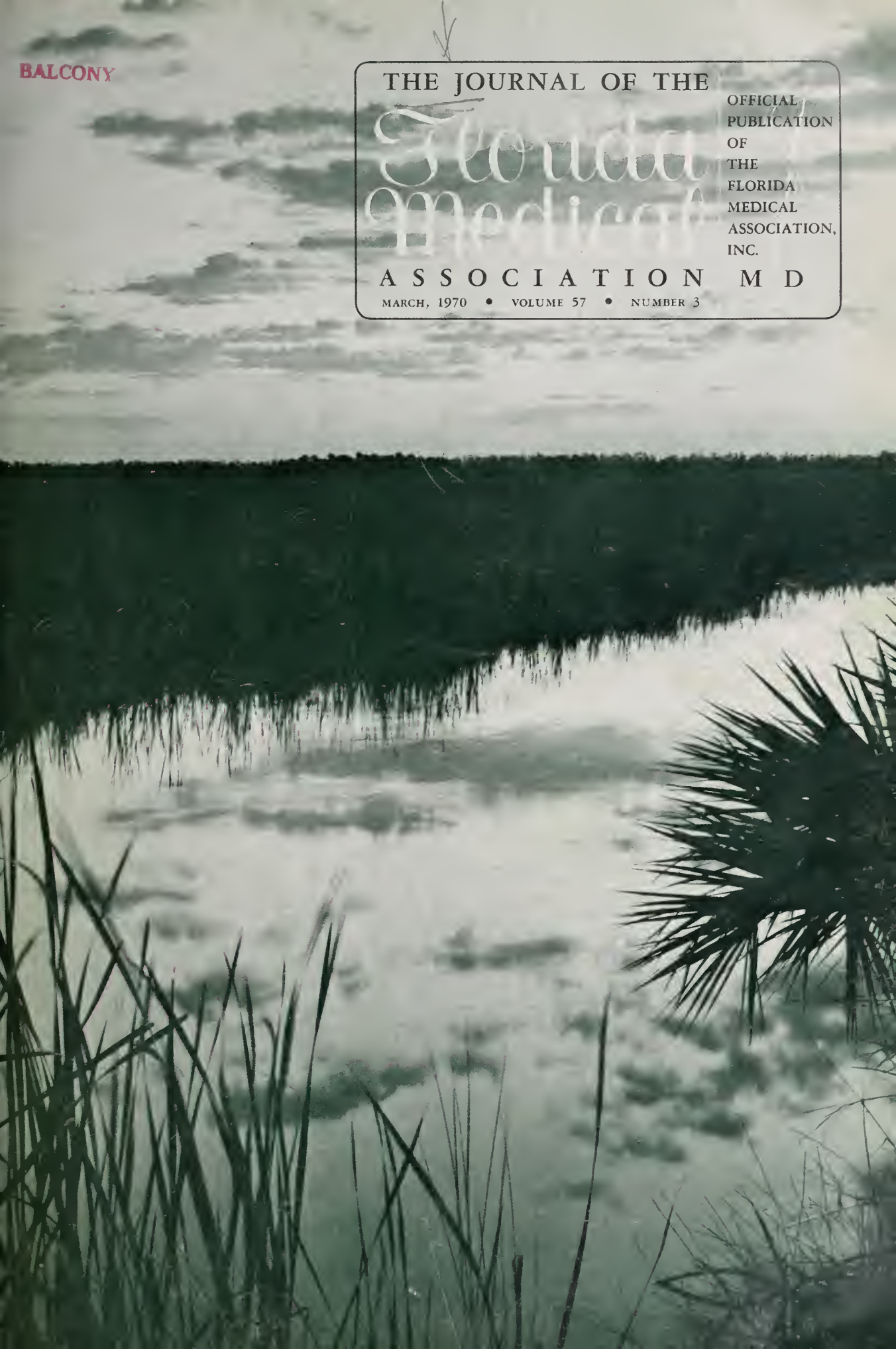
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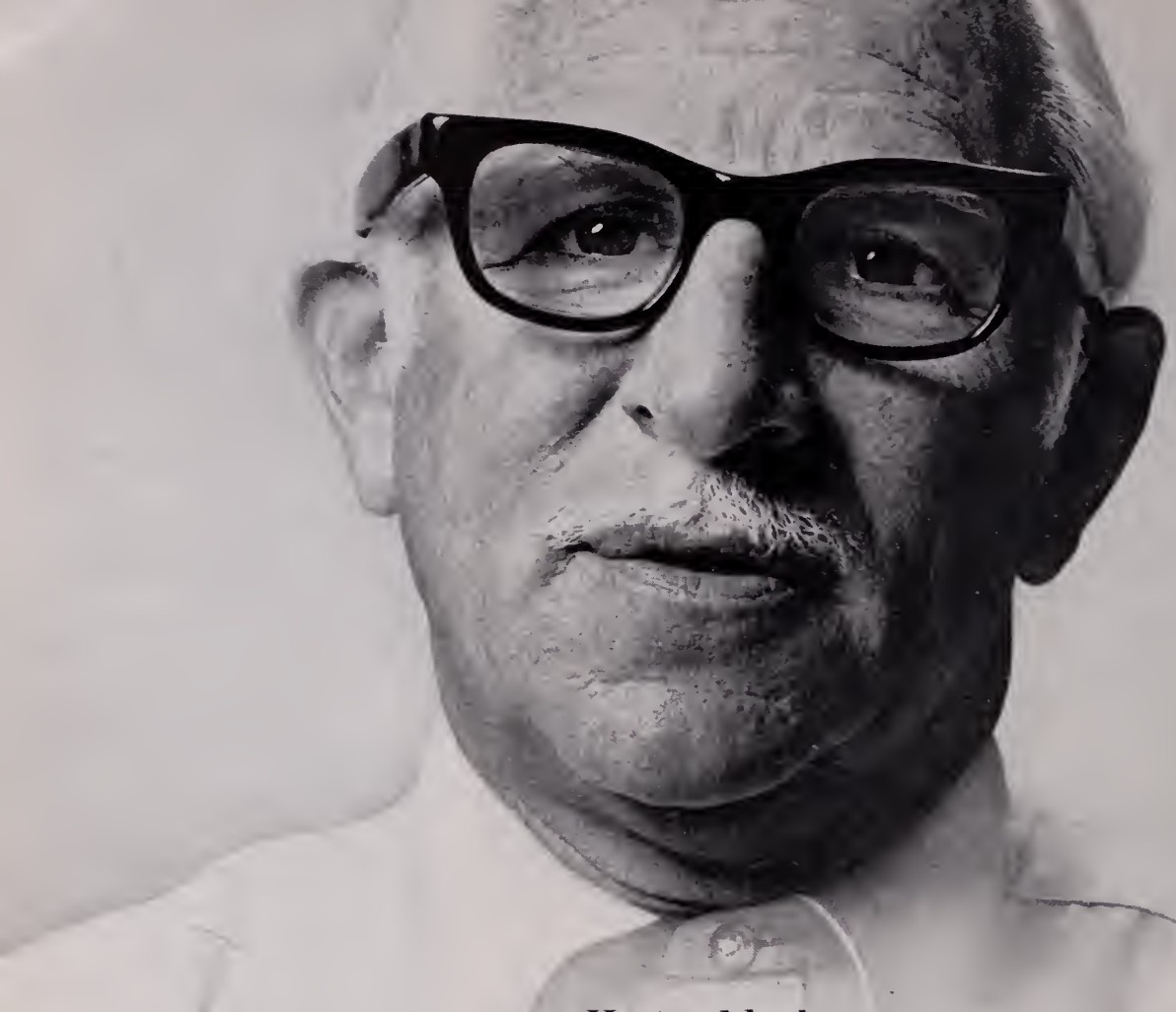
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References:
(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.



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Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriat measures should be taken. In infants, increased intracranial pressu with bulging fontanels has been observed. All signs and symptoms ha disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, dia rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopa ular and erythematous rashes; a rare case of exfoliative dermatitis ha been reported. Photosensitivity; onycholysis and discoloration of th nails (rare). Kidney—rise in BUN, apparently dose related. Transien increase in urinary output, sometimes accompanied by thirst (rare Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxi Teeth—dental staining (yellow-brown) in children of mothers given thi drug during the latter half of pregnancy, and in children given the dru during the neonatal period, infancy and early childhood. Enamel hypo plasia has been seen in a few children. If adverse reaction or idiosyn crasy occurs, discontinue medication and institute appropriate therapy Demethylchlortetracycline may form a stable calcium complex in an bone-forming tissue with no serious harmful effects reported thus fa in humans.

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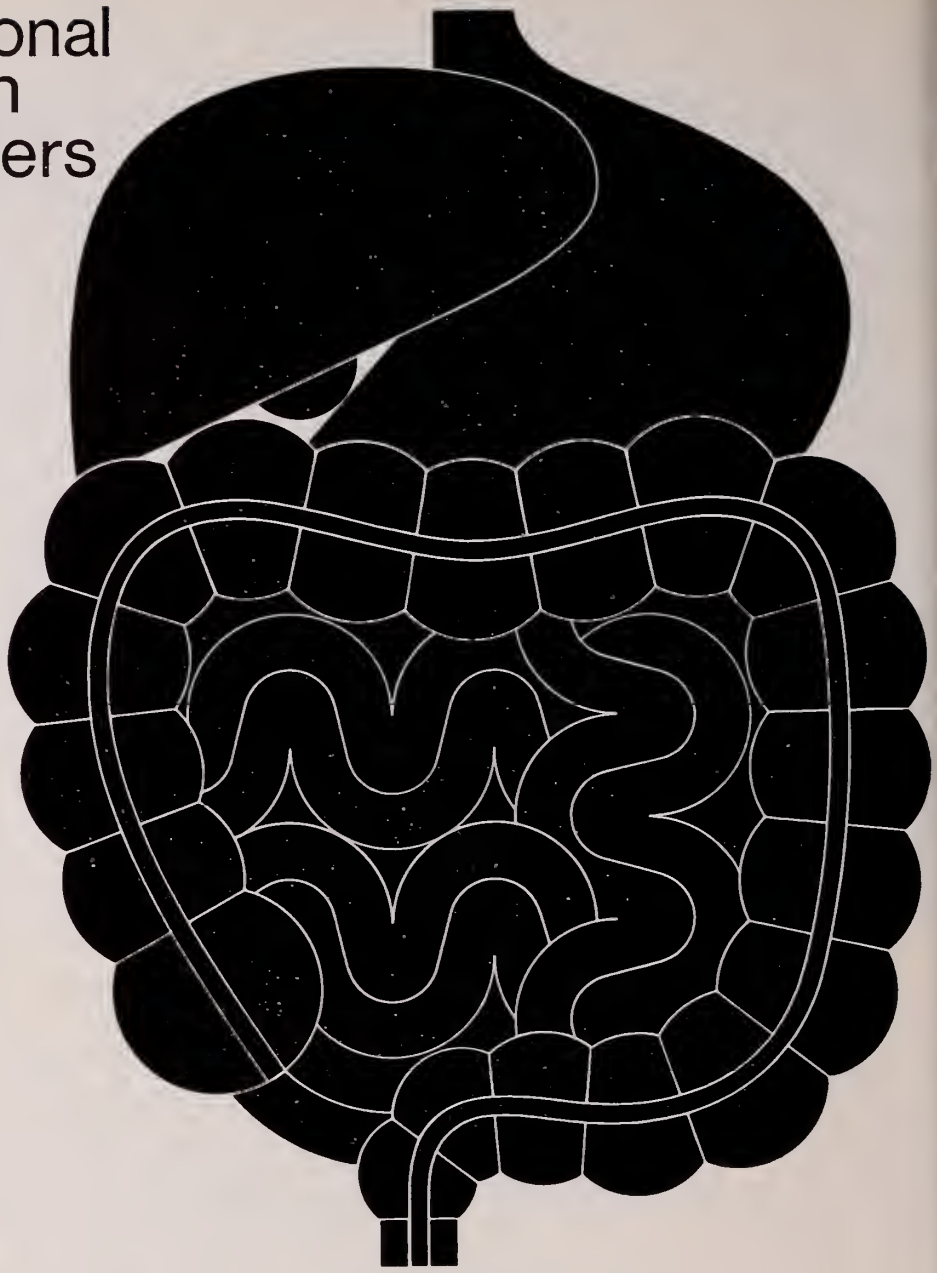
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Indications: Nutritional supplementation in conditions in which water-soluble vitamins are required prophylactically or therapeutically.

Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.

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16	3.50	4.40
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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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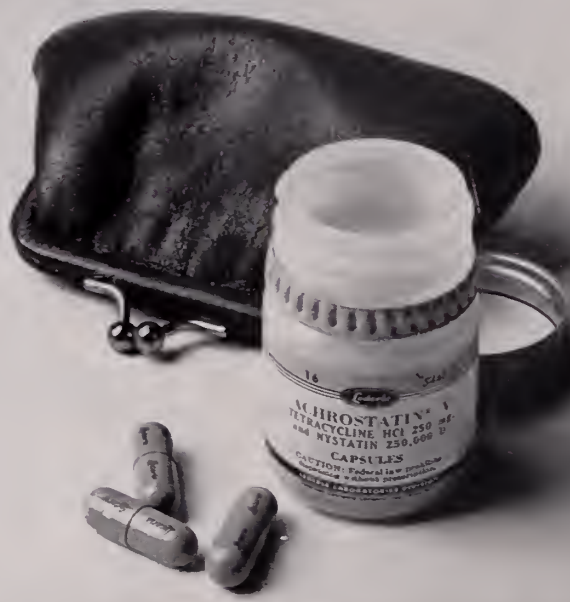
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no odor, and virtually no aftertaste

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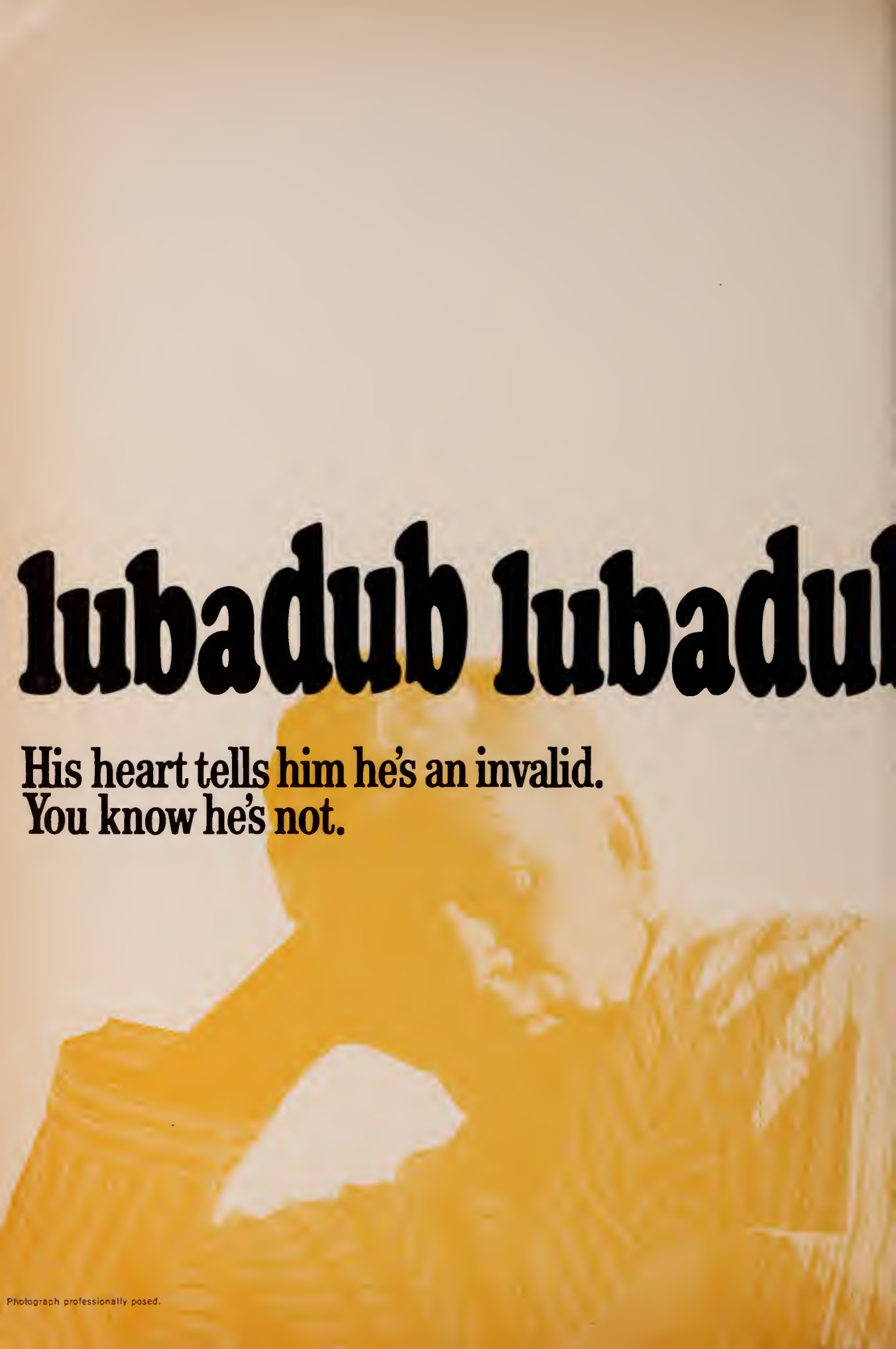
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His heart tells him he's an invalid.
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Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

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Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis,

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xiety is expected in the cardiovascular patient.
ittle may even be desirable.

t when anxiety is exaggerated . . . when it
erferes with sleep . . . when it aggravates
rdiovascular symptoms, your help may
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turally, you'll want to reassure the patient.

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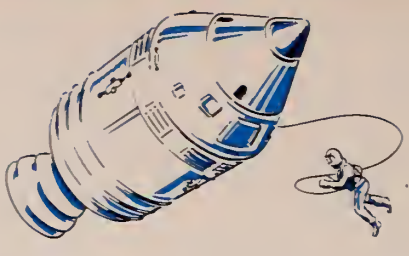
stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

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County Presidents and Secretaries Conference: Areas of Interest

On January 31st and February first, two major conferences of interest to each of you were held. These were our twelfth Annual Conference for County Medical Society Presidents and Secretaries and our Legislative Seminar.

In the reports to your officers a number of matters were explained which should help everyone in our association understand better the problems we face. Many of the subjects discussed may be controversial and the more you know about them the better prepared you will be for discussions at our annual meeting in May 1970 (May 6-10 at the Diplomat Hotel, Hollywood). Our speakers were well prepared and did not waste anyone's time. I would like to mention specifically a few areas of intense interest:

1. Hospital staff privileges.—Our FMA relationship with the hospitals in Florida was discussed briefly by Dr. Vernon Astler, who is chairman of our Committee on Hospitals and Extended Care Facilities. There is every reason why we should develop means of conversing with the Florida Hospital Association and exchanging views. This is in the process of developing and we are all pleased with the possibilities. Dr. Astler emphasized the great importance and necessity of up-to-date hospital by-laws. Our hospital staff privileges and our working arrangements with hospitals are most important.

2. Our legislative program is beginning to take excellent shape. Dr. Sanford Mullen and his blue-ribbon Committee on State Legislation gave reports in depth which I hope your leadership will report to you. We all recognize that our legislative effectiveness lies in each one of us, the "grass roots," and depends on thorough knowledge of each of us about our efforts. I think you will be pleased with our improved organization but somewhat dismayed at the problems which face us.

3. We heard other authoritative reports which surely emphasize that we must be prepared to work with national, state, and local groups—governmental, allied professional, voluntary, industrial, et cetera—whether we like it or not. We might prefer to be let alone but this is an impossible state of mind. We must be prepared to deal intelligently and in an organized fashion with many, many groups working on health matters. For example, we heard a report from James A. Bax, Ph.D., secretary of the Department of Health and Rehabilitative Services of the State of Florida. He has 24,000 employees in his department. Dr. Ernest B. Howard, executive vice president of the AMA, discussed various problems on the national level which cannot be overlooked, and Dr. Granville Larimore gave a report on the Florida Regional Medical Program which is a federal-state program.

4. Our failure to obtain satisfactory responses to our long-standing petition on the Workmen's Compensation fee schedule was discussed by Dr. Joseph G. Matthews, chairman of the Council on Specialty Medicine, who represents us well. We will not let this drop or go by default. We are all resentful of this kind of treatment.

5. A detailed explanation of our professional liability insurance program was given by Mr. Leyton Hunter. The cost of this insurance is getting almost prohibitive and you should know the serious reasons for this. This problem is one of the key items in our legislative program and you will hear more about this.

6. The announcement was made that our AMA delegation will nominate Dr. Jere W. Annis of Lakeland for the presidency of the AMA. This has the enthusiastic support of your Board of Governors. We feel that Dr. Annis has an excellent chance for election and that aggressive support from each of us in FMA will help. Dr. Francis T. Holland, chairman of our AMA delegation, will serve as campaign chairman and will keep you informed.

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Contraindications: Parphyria or sensitivity to barbiturates.
Precautions: Exercise cautian in maderate ta severe hepatic disease. Elderly ar debilitated patients may react with marked excitement or depression.
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Every pharmacist knows ACHRO® V stands for ACHROMYCIN® V

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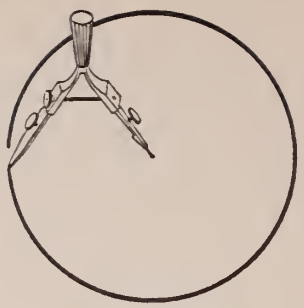
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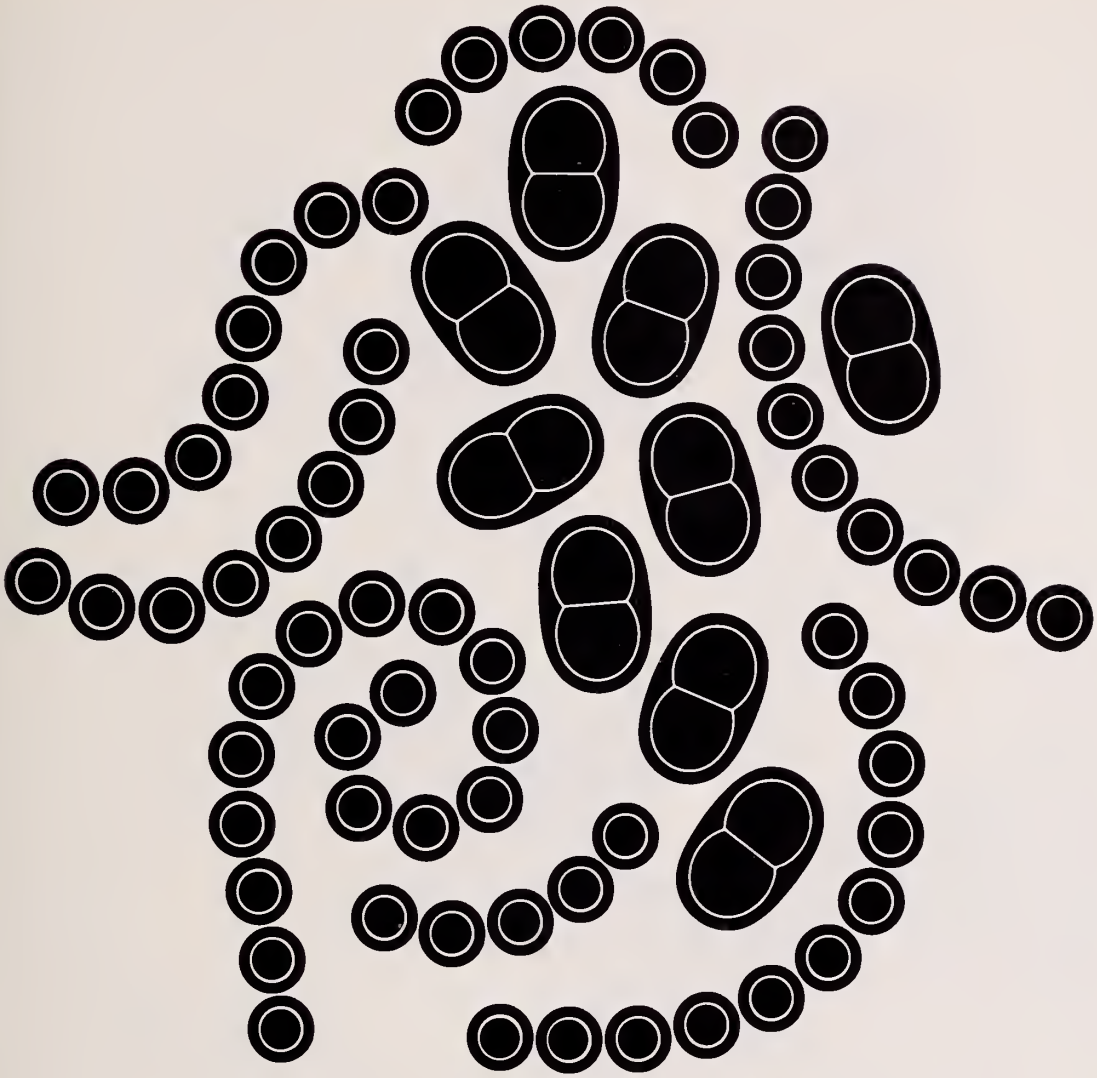
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A New Form of Thyroid Therapy

William A. Abelove, M. D.

Desiccated thyroid has been the accepted form of replacement therapy for many years.[1-3] Clinical results are usually good and the range of the protein-bound iodine (PBI) in adequately treated hypothyroid patients is well established so that this determination serves as a useful guide in monitoring therapy.

More recently, the use of sodium 1-thyroxine (T_4) has gained increasing acceptance. This synthetic hormone provides all the metabolic effects of desiccated thyroid and offers the advantages of uniform composition and potency.[3] However, not all the usual biochemical determinations are brought within their normal ranges in adequately treated hypothyroid patients so that clinical euthyroidism may not represent true physiologic equilibrium. Moreover, the clinician is on less secure ground when the PBI is used as a guide to therapy with sodium 1-thyroxine since its range in clinical euthyroidism is much less well established and abnormally high values are to be expected.[1-7]

Desiccated thyroid owes its activity to the presence of the two hormones, 1-thyroxine and 1-triiodothyronine (Fig. 1). Since both are available in synthetic form, it should be possible to prepare a combination which would simulate the action of desiccated thyroid. Such a preparation should produce the same physiologic response as does the endogenous secretion and, at the same time, permit the use of the PBI to monitor therapy in the usual way.[1,3,6,8]

A preparation of this kind* was studied in a group of hypothyroid patients. It was provided in tablet form in several potencies on the assumption that each 50 mcg. of sodium 1-thyroxine and 12½ mcg. of sodium 1-triiodothyronine was equivalent in therapeutic activity to 1 grain desiccated thyroid.

Materials and Methods

A "synthetic" thyroid should produce clinical euthyroidism in hypothyroid patients and should maintain this status in patients adequately treated with other forms of therapy. The laboratory parameters in either case should fall within the ranges of "normal" when the patient is clinically euthyroid as they do with desiccated thyroid. Side effects should not be more severe or more frequent than with desiccated thyroid itself.

The study design, therefore, utilized hypothyroid patients in my private practice who were clinically euthyroid with accepted thyroid replacement therapy as well as "new" patients not currently in the euthyroid state.

Liotrix was supplied in tablet form in potencies assumed to correspond in therapeutic activity to

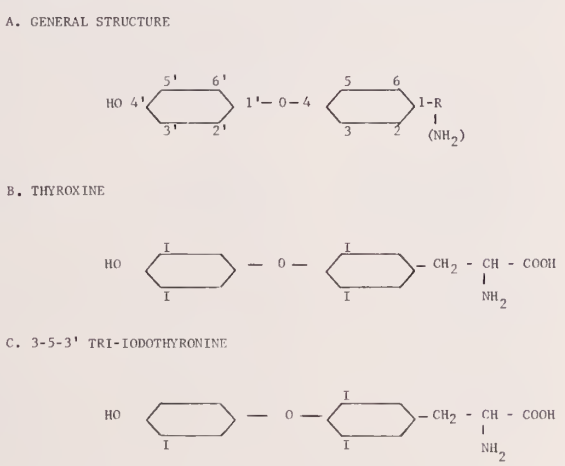


Fig. 1.—Thyroid Hormones and Cogeners.

Dr. Abelove is clinical associate professor of medicine, University of Miami School of Medicine, Miami.

*Thyrolar (liotrix), Armour Pharmaceutical Company, Kankakee, Illinois, courtesy of L. J. Klotz, Ph.D.

½, 1, 2 and 3 grains desiccated thyroid. Desiccated thyroid contains 1-thyroxine and 1-triiodothyronine in the form of peptide complexes. After hydrolysis in the gastrointestinal tract about 60%-70% of the 1-thyroxine and about 85% of the 1-triiodothyronine are absorbed.[2,9-13] The weight ratio of T_4:T_3 of 4:1 as used in our study provides about a 3:1 ratio after absorption assuming 65% T_4 absorption. This is approximately the ratio of the two hormones found in the human thyroid gland in the form of peptide complexes.[2]

Patients entering the study were examined and values obtained for PBI, T_3-resin uptake and serum cholesterol. In addition, complete blood count, urinalysis and serum glutamic oxaloacetic transaminase determinations were carried out before and after treatment with liotrix in a representative number of patients. Liotrix was then substituted for the previous medication in clinically euthyroid patients or begun in the usual way in new patients.

In patients previously stabilized with desiccated thyroid, liotrix was substituted on a tablet for tablet dosage basis; in those receiving sodium 1-thyroxine, dosage was based on the assumption that 100 mcg. (0.1 mg.) of sodium 1-thyroxine should be roughly equivalent to 1 grain desiccated thyroid or the liotrix equivalent.[1,3,14,15]

It was believed desirable to evaluate the efficacy of each of the several potencies; therefore, some patients received the total daily dose as a single tablet while others were given two or more tablets of lesser potency to achieve the necessary dosage. Thus a patient requiring 3 grains desiccated thyroid a day could have been given the liotrix tablet equivalent to 3 grains desiccated thyroid or 3 "one grain equivalent" tablets or even 6 of the ½ grain equivalent tablets a day, all given, however, once a day. In new patients liotrix was begun with the lower potency tablets and increased as indicated.

Thirty-six patients were studied. Six had been stabilized with desiccated thyroid, 23 with sodium 1-thyroxine and seven were newly diagnosed or the dose of medication not stabilized when liotrix was begun. Ten patients were male (aged 18 to 69); the remaining 26 were female (aged 20 to 76). All patients received the combination drug eight to 12 weeks. Sixteen patients were then transferred to sodium 1-thyroxine alone for periods of four to six weeks following which liotrix was again substituted for 10-12 weeks.

Results

All patients were maintained in the euthyroid state with liotrix substituted for the original replacement therapy. One patient required a dosage adjustment from 3 grains to 2 grains equivalent per day.

No statistically significant differences in T_3-resin uptake or serum cholesterol were seen when comparing values obtained while on sodium 1-thyroxine, desiccated thyroid or liotrix indicating that, as far as these parameters are concerned, these drugs are completely interchangeable (Table 1).

However, as expected, the PBI values on patients clinically euthyroid while taking sodium 1-thyroxine were significantly higher ($p<0.01$) than those found after transferring to liotrix. The mean values were 7.7 ± 2.3 and 5.9 ± 1.9 re-

Table 1

T_3-Resin Uptake	Pre-Study Stabilized on T_4 or Desiccated Thyroid	After 8-12 Weeks Liotrix	After 4-6 Weeks T_4	After 10-12 Weeks Liotrix
Mean and std. dev.	32 ± 5%	29 ± 5%	34 ± 5%	31 ± 5%
Range	22-41%	22-47%	23-43%	21-39%
No. of patients	23	23	16	16
*Mean and std. dev.	29 ± 3%	28 ± 2%		
Range	26-31%	26-31%		
No. of patients	6	6		
Cholesterol				
Mean and std. dev.	254 ± 65 mg.%	231 ± 48 mg.%	217 ± 49 mg.%	221 ± 47 mg.%
Range	145-404 mg.%	159-302 mg.%	105-300 mg.%	130-282 mg.%
No. of patients	23	23	16	16
*Mean and std. dev.	309 ± 59 mg.%	271 ± 51 mg.%		
Range	230-397 mg.%	200-326 mg.%		
No. of patients	6	6		

*Stabilized on Desiccated Thyroid

spectively. Also, for those patients switching back to sodium 1-thyroxine after being maintained on liotrix, the PBI was again found to be significantly higher ($p<0.001$). For these 16 patients, the values were 5.7 ± 2.1 following liotrix therapy and 9.2 ± 2.5 after maintenance on sodium 1-thyroxine (Table 2).

Side effects while using liotrix were minimal and consisted of those usually found in thyroid replacement therapy such as nervousness and/or moderate to severe headache. In no case were they severe enough to warrant discontinuation of the drug.

All potencies of liotrix tested (½, 1, 2 and 3 grains equivalent) proved to be equally effective. Replacing a dosage of 2 or 3 grains per day as one tablet with the same total dose using ½ grain tablets maintained the euthyroid status equally effectively.

In the seven "newly diagnosed" patients, liotrix proved to be excellent initial therapy. Laboratory values were brought into the normal range and the patients were maintained in a euthyroid state using appropriate dosages of liotrix only.

Liotrix was considered a satisfactory replacement therapy in all instances and in the majority of cases patients felt better than when taking other forms of replacement therapy.

Illustrative Cases

A review of illustrative cases follows. In several instances liotrix therapy was interrupted for about 60 days after approximately two months treatment. During this period the patient received his previous form of thyroid replacement therapy, thus permitting a second confirmation of clinical condition, laboratory values and dosage equivalence.

Juvenile Diabetes and Myxedema. The patient is a 20-year-old white male diabetic with onset of the condition at age six. Control of diabetes was fair to good on a combination of 20 units Ultralente and 16 units of regular insulin daily in the morning, in addition to a 2,500 calorie diet. Hypothyroidism was diagnosed in September, 1966 and confirmed by a PBI of 0.6 mcg.% and a cholesterol of 392 mg.%.

Liotrix was given in gradually increasing dosage up to a daily dose representing the equivalent of 3 grains desiccated thyroid.

The patient achieved the euthyroid state very dramatically within a few weeks. At the conclusion of seven months interrupted liotrix therapy, the PBI was 4.5 mcg.% and serum cholesterol 130 mg.%.

Spontaneous Adult Hypothyroidism. The patient is a 68-year-old white female with a 12-year-old history of symptomatology compatible with myxedema, i.e., lethargy, dry skin, weight gain, and facial puffiness. When first seen she had been taking 1 grain desiccated thyroid a day. This therapy was stopped and approximately six weeks later the PBI was 2.5 mcg.% and the cholesterol 440 mg.%, with the patient very typically hypothyroid. She responded to a daily dose of 0.2 mg. sodium 1-thyroxine and became clinically euthyroid with a PBI of 8.5 mcg.% and a cholesterol of 300 mg.%.

Liotrix was substituted at a daily dose representing the equivalent of 0.2 mg. sodium 1-thyroxine or 2 grains desiccated thyroid. She received liotrix over the seven month interrupted study period and became clinically euthyroid with a PBI of 6.0 mcg.% and a serum cholesterol of 222 mg.%.

Hypothyroidism Secondary to I^{131} Therapy for Thyroid Carcinoma. The patient is a 33-year-old white male who at the age of 11 had a total thyroidectomy and radical neck dissection for adenocarcinoma of the thyroid. Cervical lymph node metastases developed which were treated with massive doses of I^{131} at the ages of 14 and 15. Following surgery he was hypothyroid and hypoparathyroid, as well as suffering from bilateral recurrent laryngeal nerve paralysis.

Therapy over a period of many years had consisted of 3 grains desiccated thyroid or 0.3 mg. sodium 1-thyroxine along with Hytakerol, calciferol and calcium gluconate. The patient had been clinically euthyroid with this regimen.

He was given two courses of liotrix therapy for periods of two and three months respectively with an interim period of treatment with sodium 1-thyroxine at the equivalent dose of 0.3 mg. per day.

After each course of liotrix therapy the PBI was 5.5 mcg.% with no significant variation in either serum cholesterol or T_3-resin uptake. As would be expected, however, the PBI rose to 10.3 after the period of treatment with sodium 1-thyroxine. The patient remained clinically euthyroid throughout. In his opinion, liotrix was the most beneficial thyroid replacement therapy he had received during his 22 years of treatment.

Table 2

	Pre-Study Stabilized on T_4	After 8-12 Weeks Liotrix	After 4-6 Weeks T_4	After 10-12 Weeks Liotrix
PBI				
Mean and std. dev.	7.7 ± 2.3 mcg.%	5.9 ± 1.9 mcg.%	9.2 ± 2.5 mcg.%	5.9 ± 1.0 mcg.%
Range	3.5 — 10.9 mcg.%	3.3 — 10.5 mcg.%	5.0 — 15.3 mcg.%	4.4 — 7.7 mcg.%
No. of patients	23	23	16	16

	Pre-Study Stabilized on Desiccated Thyroid	After 8-12 Weeks Liotrix
Mean and std. dev.	3.9 ± 0.9	4.7 ± 0.7
Range	2.6 — 5.1	3.7 — 5.5
No. of patients	6	6

Discussion

The oral administration of desiccated thyroid to hypothyroid patients results in clinical euthyroidism at doses which produce values of the biochemical parameters similar to those seen in normal euthyroid individuals.[6] Thus, desiccated thyroid closely simulates the endogenous secretion itself.

In our study, the values of the laboratory parameters were within the normal range when patients were euthyroid with liotrix. In those patients who had previously received desiccated thyroid, there was no statistically significant difference between laboratory values with desiccated thyroid and those seen with liotrix.

In new patients, liotrix proved to be fully as satisfactory to initiate therapy and produce the euthyroid state as have other forms of thyroid replacement therapy. When previously hypothyroid patients became euthyroid clinically, their laboratory values were within the normal range.

Since both desiccated thyroid and sodium 1-thyroxine maintain the euthyroid state, the question arises as to which is better. Desiccated thyroid can be assumed to cause a more complete response since, when the euthyroid state is produced, the biochemical status is that of the normal individual. This is not true with sodium 1-thyroxine since euthyroidism is achieved only when certain parameters, viz. the PBI, is at an abnormally high level.[1-5] On the other hand, desiccated thyroid cannot be standardized with the same degree of accuracy as can synthetic products and inactive lots have been reported.[16-18] Liotrix (synthetic T_4:T_3) is a desirable form of thyroid replacement therapy since it is constant in potency and composition and, based on the biochemical parameters it produces (PBI, T_3-resin uptake, serum cholesterol), is a "pure" form of thyroid replacement therapy.

Summary and Conclusions

A new "synthetic" thyroid preparation composed of the two active thyroid hormones has been evaluated. It is available in several potencies so prepared that 50 mcg. of sodium 1-thyroxine and 12½ mcg. of sodium 1-triiodothyronine is equivalent to 1 grain desiccated thyroid.

The preparation maintains the euthyroid state in hypothyroid patients previously stabilized with either desiccated thyroid or sodium 1-thyroxine and its use results in values which fall within the accepted range of normal of the usual laboratory parameters.

The new combination preparation proved fully satisfactory as a means of initiating therapy and maintaining the euthyroid state in new or previously unstabilized patients.

Side effects with liotrix were those to be expected with any form of thyroid replacement therapy and were not more frequent or more severe than would be expected.

Liotrix proved to be a useful form of thyroid replacement therapy and one which produces essentially the same range of laboratory parameters as does desiccated thyroid when clinical euthyroidism is achieved.

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Analysis of Cardiac Arrhythmias With the Aid of the Endocardial Electrogram

Clyde D. Schoenfeld, M.D., Onkar S. Narula, M.D.,
John W. Lister, M.D., and Philip Samet, M.D.

Many cardiac arrhythmias can be readily analyzed by the standard limb lead and precordial electrocardiogram. Conversely, it has been our experience that the right atrial intracardiac electrogram[1-3] will not infrequently facilitate the diagnosis and, therefore, the therapy of cardiac arrhythmias. The purpose of this paper is to illustrate this principle by showing several examples of the role of the intracardiac electrogram. The fundamental reason for recording the right atrial intracardiac electrogram is to clearly identify the P wave and illustrate its temporal relationship, if any, to the QRS complex.

Recording

The right atrial electrogram is recorded in our laboratory via a bipolar electrode catheter with two electrodes 0.5-1 cm. apart, located near the tip. The catheter is passed into the right atrium under fluoroscopic control percutaneously from the right femoral vein or by surgical exposure of an antecubital vein. By means of a readily constructed distribution box, two unipolar leads and one bipolar lead may be recorded simultaneously from the two tip electrodes on a multichannel photographic recorder together with a limb lead. If a multichannel recorder is not available, the unipolar and bipolar electrogram may be recorded consecutively rather than simultaneously on the standard clinical electrocardiographic unit. The atrial unipolar lead is recorded by connecting an intra-atrial electrode to the V position on the selector switch, and the bipolar lead by connecting one intra-atrial electrode to the right arm and the other to the left arm and turning the selector switch to lead 1. When the multichannel recorder is employed, the unipolar lead is recorded at 0.1-20 cycles/sec., and the bipolar lead at 40-200 cycles/sec. The unipolar lead (Fig. 1) (AUE) records the entire sequence of electrical cardiac activity, the P, QRS and T waves. The P wave is usually the largest wave in the unipolar lead. The bipolar electrode (ABE) (Fig. 1) records primarily the time of arrival of the atrial complex in the area of the intracardiac electrodes and delineates the timing of the P wave in the cardiac cycle. The QRS complex is small or absent on the bipolar electrogram. When the QRS-T complex and P wave occur simultaneously, the timing of atrial activity is best seen on the bipolar electrogram at a time when the P wave is buried in the QRS or T waves of the unipolar lead. Selected examples of the value of the right atrial electrogram will be shown.

Role

The upper panel (Fig. 2) reveals 9 leads of the standard electrocardiogram. The ventricular rhythm is regular, but P waves are not clearly evident except perhaps in lead V_1. The atrial unipolar lead (AUE) and atrial bipolar lead (ABE) and lead 2 (lower panel of Fig. 2) clearly reveal the P waves and show that the P-P interval is 0.52 sec. (atrial rate 115/min.) while the P-R interval is 0.23 sec. The atrial rate is slightly irregular. The underlying rhythm is probably sinus tachycardia with first degree A-V block, but the



Fig. 1.—Simultaneous recordings of atrial unipolar lead (AUE), atrial bipolar lead (ABE), and lead 1. Only atrial activity is noted in ABE. Time lines are 1 sec. apart, paper speed 50 mm. sec.

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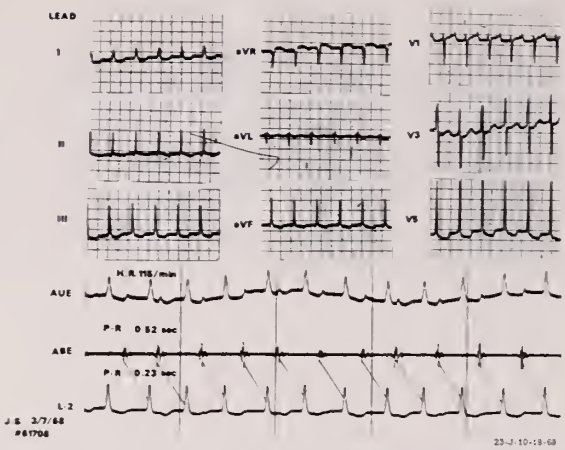


Fig. 2.—Upper Panel: Nine leads of the standard electrocardiogram. The P waves are not clearly seen, but are probably buried in T waves as best seen in lead V_3. Lower Panel: The P waves are readily identified on the atrial electrogram. The P waves are slightly irregular. Sinus tachycardia with first degree A-V block is the most likely rhythm, but a slow atrial tachycardia cannot be ruled out.

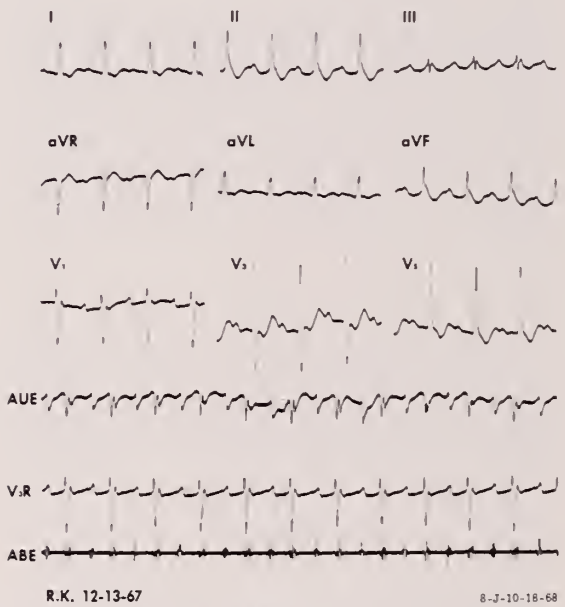


Fig. 3.—Upper Panel: Nine leads of the standard electrocardiogram. The rhythm was interpreted as sinus tachycardia, first degree A-V block, and incomplete right bundle branch block.
Lower Panel: The intracardiac electrograms clearly reveal atrial tachycardia with 2:1 A-V block. The apparent terminal portion of the QRS complex in V_3 is the second blocked P wave.

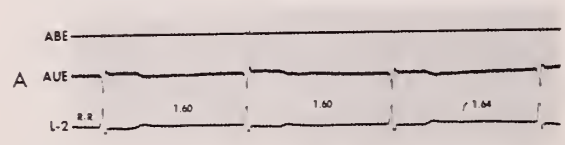


Fig. 4.—P waves are not visible on lead 2. There is no evidence of atrial activity in the atrial electrogram. Atrial standstill with or without sinus arrest or sino-atrial block is present with a slow atrioventricular junctional rhythm.

possibility of slow atrial tachycardia with first degree A-V block cannot be ruled out. The value of the atrial electrogram in identification and timing of atrial activity is further delineated in Figure 3. The 12 lead standard electrogram was interpreted as sinus tachycardia with first degree A-V block and incomplete right bundle branch block by a number of experienced cardiologists. The intra-atrial leads recorded simultaneously with lead V3R clearly revealed 2:1 A-V block. The terminal portion of the QRS complex in V3R and V1 is the second blocked P wave of the atrial tachycardia.

Two additional records will be considered together (Figs. 4 and 5). In Figure 4, the atrial bipolar lead fails to show any but minimal activity. No true atrial activity is seen. The small deflections are the ventricular deflections better seen in the unipolar atrial lead, and lead 2. Atrial standstill is present with or without sinus arrest or sino-atrial block. In Figure 5, panel A, there is no evidence of atrial activity in Lead II. The atrial unipolar lead (AUE) shows an apparently single complex whose true nature is dissected by the right atrial bipolar (ABE) and the right ventricular bipolar (VBE) leads. 1:1 A-V junctional rhythm is present. The ventricular complex slightly precedes the atrial complex as is seen by comparing ABE and VBE. The P wave is superimposed on the terminal portion of the QRS complex. This is proven by the use of atrial pacing, begun at the arrow in panel B and continued in panel C, which changes the atrioventricular rhythm, rate 62/min., to an atrial paced rhythm, rate 65/min. PI refers to the clearly seen pacer spike on the AUE, ABE and Lead II of panels B and C. With the onset of atrial pacing, the terminal portion of the QRS complex (in AUE, panel A) which is the hidden P wave, disappears as readily seen in the AUE leads of panels B and C. Figures 4 and 5 show the value of the atrial electrogram in detecting and timing the P wave.

Not infrequently an atrial arrhythmia diagnosed with confidence on the routine electrocardiogram is shown to be a different rhythm with the atrial electrogram, as in Figures 6 and 7. In Figure 6, 9 leads of the surface electrocardiogram are seen. P waves are not seen. The QRS complexes are basically regular with some irregularity noted as in aVR. A diagram of atrial fibrillation and atrioventricular junctional rhythm is made, probably due to digitalis toxicity. However, on the middle panel (AUE and Lead II), it is readily seen that the rhythm is atrial tachycardia with

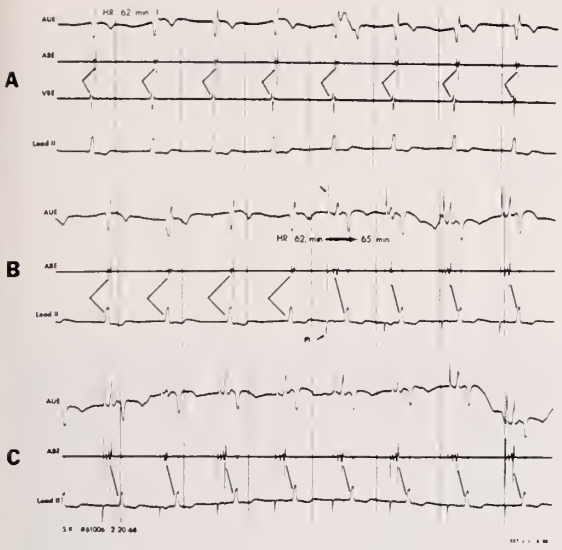


Fig. 5.—Panel A: Right atrial electrograms, lead 2, and a right ventricular bipolar lead are shown. P waves are not visible on lead 2 or on the AUE. The atrial and ventricular bipolar leads reveal clear evidence of atrial and ventricular activity respectively, ventricular activity preceding atrial by a small interval. The terminal deflection on the QRS complex on the AUE lead is probably the P wave. 1:1 atrioventricular junctional rhythm is present.

Panels B & C: Atrial pacing at a rate of 65/min. is initiated at the arrow in panel B and continued in panel C. The P waves are clearly seen to follow the atrial pacer impulse (PI). The apparent terminal portion of the QRS complex in panel A is now absent, proving that this terminal deflection was in reality the P wave.

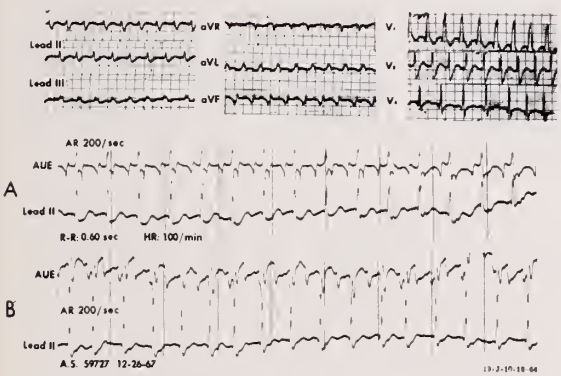


Fig. 6.—Upper Panel: Nine leads of the standard electrocardiogram are shown. The rhythm was interpreted as atrial fibrillation with basically a regular rhythm and A-V junctional tachycardia, probably due to digitalis toxicity.

Middle Panel: The atrial rate is regular at 200/min., with atrial tachycardia with 2:1 block.

Lower Panel: These tracings were taken one minute after those in the middle panel. The atrial rhythm and rate are unchanged, but A-V conduction has become more irregular. Lead II may be readily incorrectly interpreted as showing atrial fibrillation.

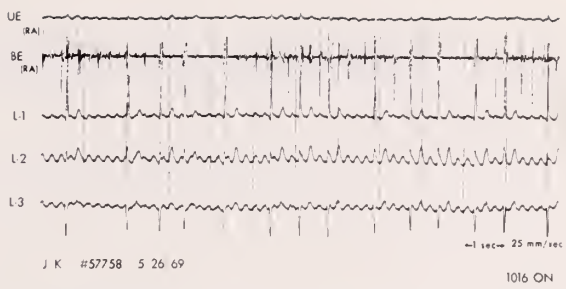


Fig. 7.—The standard limb leads suggest atrial flutter, but the atrial bipolar lead clearly reveals the irregular chaotic atrial activity characteristic of atrial fibrillation.

2:1 atrioventricular block. The tracings in the lower panel were taken one minute after those in the middle panel. The atrial tachycardia persists unchanged, but atrioventricular conduction changes and the ventricular rate becomes irregular, resembling atrial fibrillation. The AUE lead in both panels of Figure 6 clearly reveals regular, well-formed evidence of atrial activity. This reverse problem is shown in Figure 7. The unipolar and bipolar right atrial leads are shown together with leads 1, 2 and 3. The limb leads strongly suggest atrial flutter. However, the bipolar lead clearly demonstrates irregular chaotic atrial activity characteristic of atrial fibrillation.

The atrial electrogram clearly shows the value of these tracings in the diagnosis of cardiac arrhythmias. While the examples chosen deal primarily with atrial rhythm, similar examples are readily available for ventricular arrhythmias and for atrioventricular conduction disturbances. These have not been dealt with in the interest of brevity.

Summary

The value of the right atrial intracardiac unipolar and bipolar electrograms has been illustrated in a series of atrial arrhythmias. These tracings show that the atrial electrograms are essential for corrected diagnosis and, therefore, therapy in selected cases of cardiac arrhythmias.

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Percutaneous Trephine Bone Biopsy

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Incidence of metastasis to bone is high from malignancies of all types; therefore, skeletal metastasis, when suspected, may necessitate modification in the choice of therapy for the primary neoplasm. Bony metastasis is most commonly identified by radiographic skeletal survey which has been improved by radioactive isotope bone scanning. A tissue diagnosis may be made by the direct and nontraumatic technique of percutaneous bone biopsy. Frequently it can be the procedure of choice to establish a definitive diagnosis and should be considered before more elaborate and difficult biopsy procedures are undertaken.

Often the first physician to become aware of metastasis is the radiologist; yet the subject of percutaneous bone biopsy only recently appeared in radiological literature.[1] Since many bones are accessible to the procedure, all physicians and especially radiologists should be acquainted with the indications and the technique of percutaneous bone biopsy as performed with a trephine instrument.

Technique

Ackermann has previously described the technique;[2] however, a short resume is presented of the biopsy of a lumbar vertebral body.

The examination is performed with the patient in the prone position on the radiographic table. Aseptic technique and local anesthesia are used. Localization radiographs in the frontal and cross-table lateral projection with skin markers in place are made over the proposed biopsy site. A locator is introduced through a small skin incision 4 to 5 cm. lateral to the spinous process and angled obliquely toward the vertebral body. Major structures will deflect the locator's blunt point. Upon meeting bony resistance, the localization radiographs are repeated. The procedure can be facilitated by using Polaroid film or rapid film processing.

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The blunt locator is redirected if necessary until it is adjacent to the bone to be biopsied (Fig. 1). A sharp cutting trephine is placed over the locator and advanced with a twisting motion until it is adjacent to the bone. The locator is withdrawn; the trephine advanced, and a core of bone removed with a rotating cutting motion. Then the trephine is withdrawn and the core sent for pathological examination. If adequate tissue cannot be obtained with the trephine, various curettes are available to obtain tissue fragments (Fig. 2). Aspiration through the trephine can also be performed for culture or cytologic examination. Following biopsy, the patient is kept at bed rest for two hours and vital signs are observed at regular intervals.

Case Presentations

Our experience consisted of 14 patients; in each the course of therapy was influenced or altered by the biopsy information. There was no morbidity or evidence of significant complications.

The first two patients presented with symptoms of prostatism. Sclerotic bone densities were detected within the bony pelvis. Following biopsy the first patient was found to have Paget's disease of the bone (Fig. 3) and the second patient metastatic adenocarcinoma probably, from the prostate gland. The importance of the procedure in the management of these patients is apparent.

The third (Fig. 1) and fourth patients were found to have septic spondylitis and osteomyelitis of adjacent vertebral bodies. In one of them an organism isolated at biopsy indicated a specific antibiotic therapy.

Metastatic disease was suspected in the fifth through ninth patients (Fig. 2) and confirmed in all of them. Benign diseases were discovered in the remaining five patients including osteosclerosis, bone cyst, eosinophilic granuloma, and fibrous dysplasia. Of these patients the last was the most instructive: a 48-year-old female with a mass in the right breast. An expanding lytic lesion of the left eighth rib was identified on routine chest



Fig. 1.—Progressive destruction of first and second lumbar vertebra and underlying disc space. The blunt locator is passed through the soft bone and disc space. Paper clips are crude markers and have been replaced by a commercial mesh.



Fig. 2.—Biopsy trocar through which a surgical worm curette successfully removes a biopsy specimen.

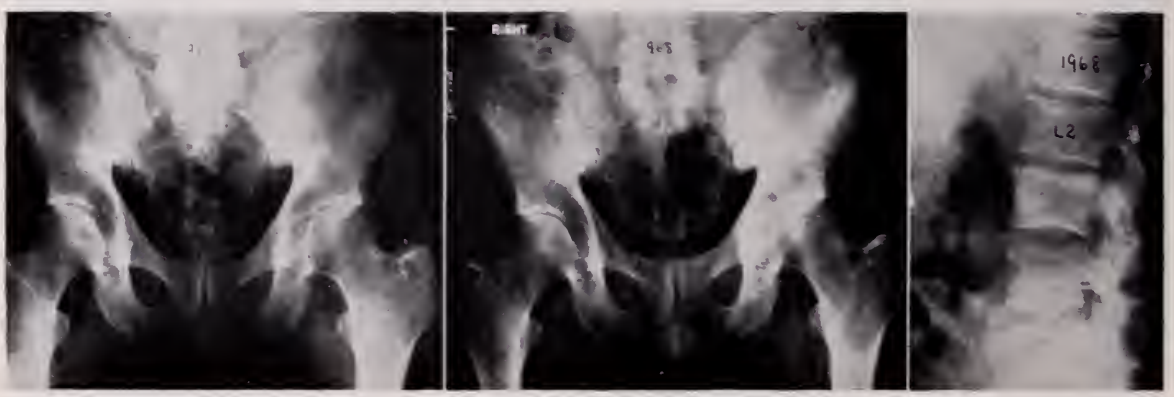


Fig. 3.—Progressive osteosclerotic pelvic and lumbar densities proved by iliac biopsy to be Paget's disease.

radiographs and, in spite of the benign appearance, metastasis had to be excluded before a mastectomy was performed. Trephine biopsy showed the lesion to be an area of fibrous dysplasia. Subsequently a frozen section proved positive for carcinoma and a radical mastectomy was performed.

These examples emphasize the aid obtained from pathological tissue diagnosis prior to initiation of definitive therapy. The treatment of neoplastic disease varies in the presence or absence of known metastasis.

Discussion

In the presence of multiple osteolytic or osteoblastic defects detected by radiographic skeletal survey, radical treatment may be withheld for a primary malignancy. Bone biopsy in these patients may be of value in confirming suspected metastatic disease. If a single bone lesion detected by a radiographic examination or isotope bone scanning is suggestive of metastasis, the type and extent of therapy of the primary tumor may depend upon pathological diagnosis of the lesion.

It has been reported that simple needle and syringe aspiration biopsy of bone lesions, particularly those of the lumbar vertebral bodies or superficial pelvic and long bones, may establish the diagnosis in 85% of patients.[3] Aspiration techniques may fail if specimens are small or fragmented. Densely sclerotic lesions of the bone may be difficult to aspirate.

Biopsy of osseous lesions by open surgical techniques can be a difficult and prolonged procedure, and for this reason a variety of instruments has been devised. The instruments are similar in concept, differing only in the mechanism in which they are introduced and directed or in which they maintain the specimen. The large caliber

instruments provide tissue specimens of substantial amount. Bleeding and other serious complications may occur; however, we have not had this experience utilizing the large bone cutting trephine modified by Craig.[4]

Theoretically, any portion of the skeleton is accessible to percutaneous biopsy; however, most biopsies have been reported of the lumbar vertebral bodies, pelvic bones, shoulder girdle, ribs and mandible. The long bones are accessible but are an infrequent site of metastatic disease. The vital structures adjacent to the cervical spine make it inaccessible except for C-1 and C-2, and occasionally C-3 which can be reached through an intra-oral approach. Since the thoracic spine is technically difficult, we have avoided biopsy in this area except for the 12th thoracic vertebra. Ackermann has had more extensive experience with thoracic vertebral body biopsy.[2]

In the aggressive approach to diagnostic evaluation of the cancer patient, percutaneous biopsy of many organs and masses may be performed by radiologists or other physicians with access to radiographic equipment. Aspiration techniques have been extensively used in the diagnosis of pulmonary nodules, renal lesions and breast masses. Percutaneous biopsy of the cutting trephine type can be performed in diagnosing diffuse pulmonary parenchymal disease, renal disease, liver disease, and in the evaluation of masses in the breast, thyroid and lymph node.

Summary

Percutaneous bone biopsy can be a routine diagnostic technique of considerable value; however, it is frequently overlooked by radiologists and other attending physicians. A commercially available instrument is used for the procedure which is performed in the conventional radiographic room with the patient under local anesthesia.

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XYY Males and Antisocial Behavior

George F. Smith, M.D., Juliet Helmken, M.D.,
Duane Logue, Ph.D. and Carol S. Shear, M.D.

The association of sex chromosomal abnormalities and aberrant behavior including mental retardation is now well established. Not yet clear but presently being investigated is the possible association of a specific behavioral reaction in males with an extra Y chromosome. Males with the double Y syndrome have 47 chromosomes with two Y chromosomes: their sex chromosomal pattern is XYY instead of XY as in normal males.

Clinical features are variable[1] but in general the adult males tend to be tall, usually over six feet. Associated abnormalities are rare and have not been consistent. In a few patients an abnormality of the genitalia has been present. The condition is one of the most common of the chromosomal abnormalities, occurring approximately once in every 250 to 300 live male births.[2]

The syndrome is creating medical and medicolegal interests because of reports in the literature which suggest that XYY males have a propensity to aggressive and antipsychosocial behavior.[3-7] The implications of these findings in terms of diagnosis, treatment and legal responsibilities are important to practicing physicians, psychiatrists and the courts.

This report presents the clinical and behavioral findings on two prepubertal boys with the XYY syndrome and summarizes the present problem which this syndrome is causing in the medical and medicolegal fields.

Case Summaries

Patient 1.—The propositus was the product of an eight month pregnancy and weighed 2,410 Gm. at birth. He had mild respiratory difficulty at birth and jaundice during the first two weeks of life but did not require an exchange transfusion. At five months a squint of the left eye was noted. Ophthalmological examination revealed a coloboma of the choroid and optic nerve. At four years of age, the boy was first seen at the clinic because the parents were concerned about his speech and delayed development

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The mother was 32 years old at the birth of this child and the father 40 years old. There are two normal sibilings and two normal half sibilings by the father's previous marriage. The family history revealed that other members were normal except two first cousins who have squints.

Physical examination showed the patient's height to be 119 cm. (40¾ in.) and weight 16.8 kg. (37 lbs.), both within the 50th percentile for his age. Head size was normal (54 cm.). There was a slight asymmetry of the skull with flatness on the left side. The left eye was smaller than the right eye and showed an enophthalmos and mild degree of ptosis. There was a coloboma of the optic nerve and choroid. He had Grade II systolic murmur heard best in the third left intercostal space. There was no thrill or radiation present. The murmur is not considered indicative of organic heart disease.

Laboratory: Buccal smear showed no Barr bodies, and blood, urine, and urinary amino acids were normal. X-rays of the skull verified the asymmetry detected at clinical examination. Bone age was normal. Electrocardiogram was normal. The electroencephalogram showed epileptogenic discharges bilaterally emanating from the occipital regions with the frequencies being variable throughout the record. Lymphocyte cultures on two separate occasions revealed 47 chromosomes in all cells. Karyotyping revealed two Y chromosomes (Fig. 1) and a sex chromosomal pattern of XYY.

Development: The boy's motor development was delayed insofar as he could not hold his head up until five months of age, did not sit alone until 10 months and failed to walk until 19 months. At four months, a squint developed and abnormal eye findings were noted. By three years six months, his vocabulary consisted of only four to five words.

Since receiving a hearing aid for bilateral conductive hearing loss and speech therapy, his speech has improved. His I. Q. on the Merrill Palmer Scale at four years two months was 106, and current performance locates him in the average range of ability.

The boy has presented a behavior problem in the home since the age of three years. He is much more aggressive and difficult to handle than the other siblings and performs destructive acts on playmates as well as the younger sibling. He has been using a hearing aid and receiving therapy for the past year, and has shown slight improvement in overall behavior; however, his parents are still concerned about the aggressive actions towards other children.

Patient 2.—The propositus was the product of full term gestation and weighed 3,458 Gm. at birth. The pregnancy and delivery were normal except that at three to four weeks gestation, the mother attempted self-abortion by ingestion of ergot and castor oil. The patient is the mother's third child. She had two other children by a previous marriage. At the birth of the child, the mother was 38 years old and the father was 28 years old. The father has a normal son by a previous marriage.

At the age of three years seven months, the boy was first seen for clinical evaluation because the parents were concerned about delayed speech and destructive behavior.

At physical examination, his height was 96 cm. (38½ in., 25th percentile) and his weight 15.9 kg. (35

lbs., 50th percentile). His head size was normal, 48 cm., and his skull symmetrical. There was a slight puffiness of orbital tissue and the bridge of the nose was slightly flattened. His heart, chest and abdomen were normal. Testes were descended and normal size for his age. There were no genital deformities. Neurological examination, vision and hearing were normal.

Laboratory: Buccal smear showed no Barr bodies. Blood and urine were normal. Radiological examination of skull and hips and bone age were normal. Lymphocyte cultures on two separate occasions revealed 47 chromosomes in all cells. Karyotyping revealed two Y chromosomes and a sex chromosomal pattern of XYY.

Development: The boy's motor development was normal. He sat alone at six months, stood at nine months and walked at 15 months. He said first words at 13 months and spoke in sentences at two years.

At the time of examination he demonstrated echolalia in speech pattern. Psychological examination showed an I. Q. of 92 on the Stanford-Binet, Form L-M. He demonstrated weakness in receptive language ability and abstract conceptualization. He was delayed in total bladder control and tended to have bowel movements in the bushes instead of the toilet.

Since the age of three years, he has shown aggressive behavior and has been easily frustrated. For the past two years (present age, five years), destructive, aggressive behavior has become increasingly more severe. Recently he crushed a kitten to death and has to be watched for fear of injuring his younger sister. He has developed a habit of getting up at night and destroying things with a knife or scissors. The nursery school teacher has continually complained about his hyperactive and aggressive behavior toward his classmates. The boy has been in a psychological therapy treatment program for the past year without a noticeable change in aberrant behavior.

Discussion

Present interest in the double Y syndrome was stimulated by the finding of males with 47 chromosomes and an XYY karyotype in increased numbers in penal institutions among those over six feet tall who demonstrated aggressive and/or antisocial behavior.[8] The frequency among prison inmates was too high to be explained by chance occurrence alone. The fact that this type of survey is based upon biased sampling has been recognized; notwithstanding, there are now many reports of antisocial and destructive behavior in males having an extra Y chromosome who have never been in jail. While not all adult males with the extra Y chromosome are over six feet tall nor exhibit antisocial behavior, there is still a high percentage who do manifest these findings. The syndrome occurs in about 3% of male prisoners who are over six feet tall and are aggressive but is found in only about 0.2% of the normal male population.

Little information is available about prepubertal males with the syndrome. Supposedly behavioral symptoms develop in many patients about the time of puberty. However, there is also good evi-

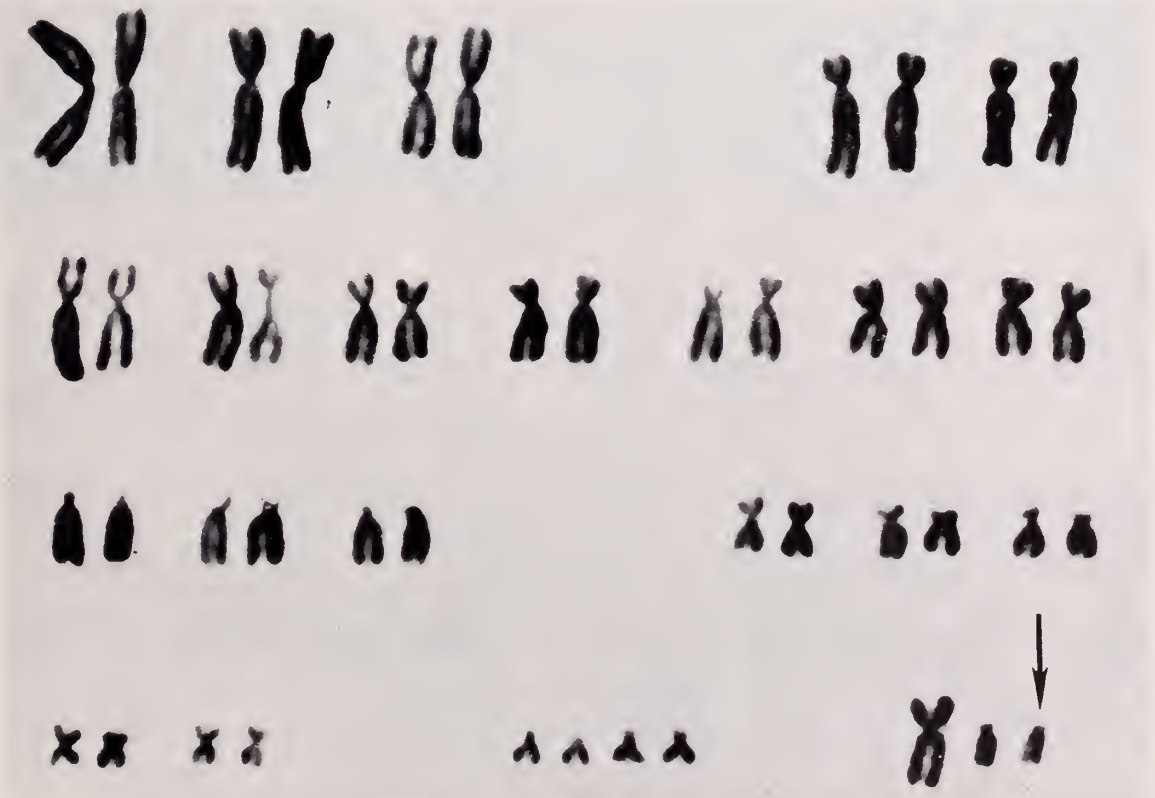


Fig. 1.—Karyotype on the first patient showing the extra Y chromosome and an XYY sex chromosomal pattern.

dence that some prepubertal boys show aberrant behavior. This is well demonstrated by both of our patients. Minor signs of abnormal behavior were detected by age three in the second patient and overt aggressive and destructive types of behavior were present by the time he was five years of age. The first patient was somewhat different insofar as he was less destructive and had some improvement in overall behavior as hearing and speech problems were treated. Nevertheless, his parents are concerned about his aggressive behavior with increasing age.

If there is relationship between antisocial behavior and the extra Y chromosome, the exact nature is not understood. It has been argued that the antisocial behavior manifested is only secondary to unusual height and other environment experiences. While environment is undoubtedly playing a major role, the homogeneity of behavioral reactions demands an additional explanation to account for the similarity of these patients' social response. All the sex chromosomal aberrations manifest, to different degrees, evidence of central nervous system changes. The changes may be in behavior, mental abilities or evidenced by the electroencephalogram.

In the double Y syndrome, the patients usually have normal intelligence with only an occasional patient being retarded. No consistent changes in the electroencephalogram have been found. In most patients, the electroencephalogram is considered normal; however, brain wave changes as shown on the electroencephalogram of the first patient were considered abnormal.

Two recent court trials of males with this syndrome accused of murder accentuate the magnitude and variation of the problems presented by this syndrome. In Paris, France, the patient was judged sane and found guilty of murder, while in Melbourne, Australia, the patient was judged legally insane and committed to an asylum. Neither decision answers the many questions raised by this type of medicolegal problem. The legal judgments were rendered on the basis of existing laws which may or may not be applicable to an entirely new type of medical psychological problem.

One of the major questions that needs to be answered is: "Can criminal behavior be predetermined based upon a person's genetic constitution or chromosomal makeup?" If these individuals are more likely to get into trouble, how can this be prevented? Very little is known about treatment or preventive measures in this syndrome. The problem facing the courts is: Should these individuals be judged by the same legal code as those who have normal chromosomes or others who are judged psychiatrically insane? If there is an element of predetermination of behavior in the genetic makeup of these individuals, how does this modify their degree of guilt? If guilt is established, what type of incarceration is most appropriate?

The immediate question raised by this syndrome is: Should all criminals have a more intensive medical psychiatric and genetic evaluation including chromosomal studies in selected cases?

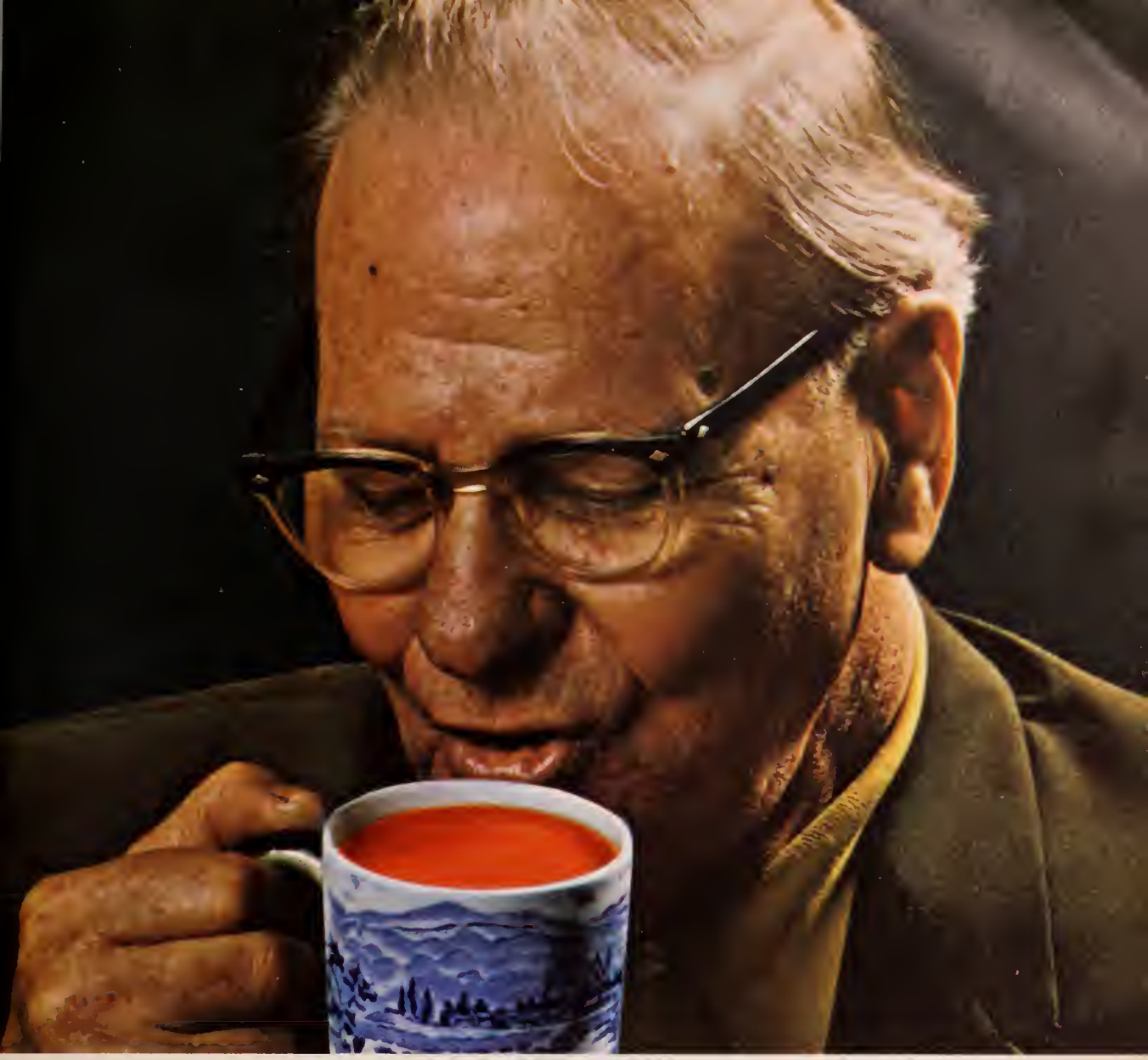
The question of predetermination of behavior is not new. It was prevalent in Calvin's theology and is inherent in the concept of the "bad seed." What is new is that there now may be a way of actually seeing and identifying the cause of the aberrant behavior, namely, the extra Y chromosome, though this cause is far from established at this time. During the middle of the 19th century, Dr. Oliver Wendell Holmes wrote extensively on prenatal and early childhood influences on behavior and how these influences affect an individual's action as related to moral and legal responsibility. The concept of congenital or inherited behavior can also be found in present-day novels such as "The Naked Ape."[10] In addition, animal experiments suggest the possibility that changes in the prenatal biochemical environment may affect postnatal behavior.

The answers to most of the questions proposed will be predicated upon first showing a direct or indirect relationship between the aberrant behavior and the extra Y chromosome. At the present time, the relationship is only tentative and demands a great deal more concentrated study.

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▶ Dr. Shear, P. O. Box 875, Biscayne Annex, Miami 33152.



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Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Actions—Ovulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen depresses the output of both the follicle-stimulating hormone (FSH) and the lutenizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates in the United States found relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives. This has not been confirmed in the United States.



Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for 2 months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: Increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

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Florida Medical | editorial

Adequate Emergency Service to Increasing Numbers

Clyde M. Collins, M.D.

In Orlando last October, the Florida Medical Foundation and the Florida Division of Health, in cooperation with the Florida Hospital Association, sponsored a program entitled "Modern Emergency Room Management." A second conference was presented in Fort Lauderdale and, at each, there was good attendance representing those involved in providing health care. The programs were planned and coordinated by the Committee on Emergency Medical Service of the Florida Medical Association.

The participants commented on changes in medical care patterns requiring the need for new systems of delivery, better utilization of paramedical personnel, regionalized distribution of health care facilities and additional categories of associates or assistants. Transportation of the sick and injured to the hospital was outlined in detail with cardiac resuscitation by corpsmen using mobile EKG's enroute and being advised by radio-telephone by a physician viewing the telemetry monitor in the emergency room. Suggested also were state surveys of emergency facilities to categorize and establish area patterns of medical care. Better records, procedure manuals, disaster plans, emergency room committees and cost accounting systems were also advised. Comprehensive accident analysis by trauma registries to facilitate studies on convalescence and rehabilitation was discussed, and autopsies on all accident victims were recommended.

Adequate appraisal and advice or initial treatment must be rendered to any ill or injured person who presents himself to the hospital, and with the increasing appearance of non-urgent patients at the emergency room more discussion and planning is obviously needed to solve the dilemma. For an uninterrupted course of patient flow, medical triage appears mandatory. Disposition as to time of care for each patient depends upon the degree of severity of his condition, giving priority to one who needs immediate attention, a short wait for those requiring less care and referral of others to clinics or private offices. To the ubiquitous question of the public, "What can we do to get a physician?" those advocating a new type of delivery of health care were very positive that they had the answer. On display at the conference was the discussion of this development of full-time emergency room staffs by physicians who seek and obtain special training in dealing with trauma cases, stay abreast of advances in this field and who supply full-time around-the-clock service.

The American College of Emergency Physicians has been established to provide status for anyone so desiring it. Certainly those interested in developing this specialty should band together realizing that in order to have the support of their colleagues and continued acceptance by the public, experience, ability and service should be their building stones. To obtain equality with and acceptance from members of other specialties, all of whose borders are being traversed, training necessary for becoming proficient in the treatment of trauma patients should be categorized. Should this new specialty attract the cynical, the misfit or the irresponsible fee gouger, or if the field is entered by a physician looking for an easier life with more pay, only the public will be the loser. As every year demands for health care continue to increase out of all proportion to the number of new doctors becoming available, any new system for providing care should be planned to increase physician productivity and to carry its share of the patient load. To be commended are those who are assuming the responsibility of providing full-time, readily available, prompt professional medical coverage to all who want it. The growth in medical technology has made it impossible for one person to confidently become familiar with all the

disciplines, but an ambulatory care program, designed to anticipate the medical needs of society, achieve a balanced growth of health care, and transacted in an ethical manner can only be condoned. In developing any new specialty, questions arise such as "Where does legitimate specialization end and unwarranted fragmentation begin?" "Are new boundaries set as an expediency for those being rendered this service or rather for those who are intending to render the services?" And in the pandemonium of injured, sick and not-so-sick patients, those looking for their own physician, and patients who have no doctor, how does the physician, working with personnel employed by the organization operating the emergency room, maintain his own independence?

Advances in the care of patients will continue as we physicians continue to look for answers we do not have and search for better methods than the ones we are now using. Whether this proposed system using hospital-based physicians is a better way remains to be seen. Yet somehow, while adjusting to the temper of the times, we must see that quality health care is available to all citizens at the time that they require it. Needing the talents of all our members, we can ill afford to do other than welcome this new specialty as a provisional member of the health team. Here's wishing Godspeed in becoming a mature, responsible fellow worker.

From the Editor

Franz Stewart

An Old Man

He was a small man but he could hike faster and farther than the rest of us. More important, he would spot each apple tree along the way and he would tell us about the migrating birds he saw. He introduced us to a farmhouse and the real pleasure of healthy fatigue placated by a cup of hot tea and milk.

At age 70, he grew a long beard, signed aboard a merchant marine vessel as a first aid man and served two years on the Murmansk run during World War II. Nazi torpedoes shot three ships from under him. He retired, became blind, and finished his days in South Georgia.

A Modern Psychiatric Hospital . . .



This modern psychiatric hospital is now fully operational. With completion of the comfortable seclusion rooms and lounge complex, Lakeland Manor is prepared to offer full psychiatric services. Treatment procedures are geared to the most modern concepts of psychiatry. Treatment includes intensive dynamic psychotherapy for the individual, group psychotherapy, chemotherapy, occupational and recreational therapy. Every effort is made to create a highly therapeutic milieu. Patients are admitted on referral of their physicians either on a voluntary basis or commitment. All types of emotionally ill patients are accepted, including those with alcohol addiction. All patients are treated by private psychiatrists who make regular reports to the referring physician on the patient's progress.

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Familiar Medical Quotations edited by Maurice B. Strauss, M.D. Pp. 968. Price $15.00. Boston, Little, Brown and Company, 1968.

One's enjoyment of a medical convention accrues in no small part from the social events thereupon attendant. Among the most crowded and carefree is the drug company's cocktail party where one bumps, literally, into long-lost friends. In this motley gathering a colleague with an aphorism to offer, a carefully polished bon mot to throw away, an anecdote to retail, or a moral to point will find an appreciative, more-or-less learned, circle of listeners. Communications, however, are sorely hampered by the high noise-to-signal ratio which prevails in such an ambient. As a result the quoteworthy utterance is often drowned in a sea of commonplaces and the rare nugget of wisdom lost in a drossheap.

Collectors of pearls will rejoice, therefore, to find that Dr. Maurice B. Strauss, associate dean and professor of medicine at Tufts University School of Medicine, has diligently culled the wit and wisdom of the ages for a compendium of medical quotations and, as it were, invited the reader to the most select soirée that never was. To be sure there are no free drinks but, by the same token, no loud-mouthed and witless guests are permitted to lower the tone of this thoroughly screened gathering.

Old friends abound: Hippocrates, Galen, Osler, Thomas Jefferson and George Bernard Shaw, for instance, are in full spate and top form. On the other hand, a guest list of over 1,500 must inevitably contain strangers. Precisely how "familiar" these "medical quotations" are will be a gauge of the reader's erudition. He who recognizes no one is advised to eschew this work as it is not for him.

Not every contributor has earned renown by winning a Nobel prize or by giving his name to a syndrome or a sign. Nonetheless he has been put into Familiar Medical Quotations along with the great and near great, perhaps on the strength of a single inspired utterance duly recorded and now deemed worthy of being a familiar medical quotation and so dubbed by Dr. Strauss who has been collecting and compiling for some 25 years. Furthermore, Dr. Strauss is allied with the best of all possible publishers for a book of this kind. For over 100 years the venerable firm of Little, Brown and Company has been publishing Bartlett's Familiar Quotations, which is apparently here to stay. Its perennial popularity augurs well for the new book even though the latter, presumably written chiefly for doctors, is unlikely to be sold in the same enormous numbers as "Bartlett's."

The format of Familiar Medical Quotations is slightly different from that of Bartlett's, quotations being arranged in categories as well as chronologically by author. The exhaustive index of key words, however, retains Bartlett's method, thanks to which a reader who possesses but the most rudimentary and mangled fragment of a dimly recalled quotation can usually track down the original. For the true addict this can be an exciting and satisfying experience.

Happily the list of contributors is not confined to members of the medical profession. Philosophers, scientists, men-of-letters, statesmen, soldiers, and the clergy are represented. This obviates any danger of uniformity of opinion or narrowness of viewpoint. The oldest speaker is the Yellow Emperor from 2600 B.C. (Without implying any disrespect I must say I found him rather garrulous). Among the newest is Francis Crick who shared a Nobel prize in 1962 for unravelling The Double Helix. Modern contributors are in the minority, however. Perhaps the turning of a pretty phrase is becoming a lost art in these technological times.

Familiar Medical Quotations is a browser's delight, and would make an excellent bedside book did it not weigh just over three and one-half pounds. More practically, here is an excellent reference book for the doctor who wishes to embellish his opus with an apposite quotation. It would make an ideal gift for the thoughtful medical student, giving him a long view of his chosen profession seen from both within and without.

Colin Kendall, M.D.
Temple Terrace

Florida Medical books received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Co., 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Co., 1968.

Internal Medicine Based on Mechanisms of Disease edited by Peter J. Talso, A.B., M.D., F.A.C.P., F.A.C.C. and Alexander P. Remenchik, B.S., M.D., F.A.C.P. Pp. 797. 164 illustrations. Price $17.50. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Synopsis of Pathology by W. A. D. Anderson, M.D. and Thomas M. Scotti, M.D. Pp. 957. 7th Ed. 408 illustrations. Price $10.50. St. Louis, The C. V. Mosby Company, 1968.

Atlas of Ear Surgery by William H. Saunders, M.D. and Michael M. Paparella, M.D. Pp. 363. 163 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology Edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

1970-1971 Drugs of Choice edited by Walter Modell, M.D. Pp. 924. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th Ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

Infection Control in the Hospital by American Hospital Association. Pp. 140. Price $3.75. Chicago, American Hospital Association, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Drugs on the College Campus by Helen H. Nowlis, Ph.D. Pp. 144. Price $.95. New York, Doubleday & Co., Inc., 1969.

Alcohol and the Impaired Driver by the AMA Committee on Medicolegal Problems and Subcommittee on Chemical Tests for Intoxication. Pp. 234. Illustrated. Price $2.00. Chicago, American Medical Association, 1969.

Physiology of the Gastrointestinal Tract by E. Clinton Texter Jr., M.D., Ching-Chung Chou, M.D., Higino C. Laureta, M.D., and Gaston R. Vantrappen, M.D. Pp. 262. 106 illustrations. Price $10.75. St. Louis, The C. V. Mosby Company, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

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Professional Liability Insurance

Henry J. Babers Jr., M.D.
President, Florida Medical Association

Professional liability insurance rates have increased so much recently that many questions have rightfully come up for discussions and letters of inquiry have been directed to the President of the Florida Medical Association in this regard. Here is a special message from the President. —Ed.

On a national basis the outlook for professional liability insurance continues generally unfavorable. More and more insurance companies are either withdrawing from this field or curtailing their writing of this insurance.

During 1969 rate increases were made in a number of states. An increase of 110% was made in a 12-county area of California involving 11,000 doctors. The cost in Utah for a general surgeon increased from $294 in 1968 to $3,910 in 1969.

For the doctor with a claims history in California, deductibles of from $1,000 to $5,000 with premium increases 1½ to 4 times the normal premium have been applied. In New York State, premiums for such "risks" have been increased in specific instances 3 to 5 times the normal premium. Some doctors are reported to be paying $10,000 or more annually for their professional liability insurance.

Florida has not escaped drastic premium increases. As of Dec. 17, 1969, National Bureau of Casualty Underwriters companies that continue to write this insurance have increased premiums. Hardest hit is Broward County, now classified with Dade County, where the premium for physicians has almost doubled and that for surgeon specialists almost quadrupled as a result of the reclassification coupled with the rate increase. Premiums for Dade County and the remainder of the state have been increased by approximately 75% for physicians and approximately 120% for surgeon specialists.

Florida is classed by the insurance industry, along with California and New York, as a problem state. Of the 11 largest professional liability verdicts and judgments for the entire nation over the past ten years, two were in Florida.

The Employers' Fire Insurance Company, which writes the FMA-sponsored program, has generally lagged behind Bureau companies in increasing premiums. This is clearly shown in the premium history of this program which is included in "Statistical Data." In keeping with this practice, the increase for members renewed as of Jan. 1, 1970 is limited to the elimination of a discount of about 19% heretofore applied.

The loss experience of the Employers' Fire Insurance Company in the program has been most unsatisfactory. The "Statistical Data" shows a loss ratio of 135% for the years 1962 through 1965 with a distinct possibility of a rise in this figure due to possible claims yet unreported. Furthermore, should the company cease writing this insurance the "wash-out" of losses yet to come would produce a financial loss to the company estimated as considerably in excess of $1 million.

The insurance firm advised the FMA of the absolute necessity to further increase new Bureau premiums, less a 10% discount, of all new insureds coming into this program after Jan. 1, 1970. The same increase will presumably apply to all Jan. 1, 1971 renewal policies.

The net effect of these changes for FMA members who were insured in this program in 1969 is:

Statistical Data
Professional Liability Insurance
Florida Physicians and Surgeons
Employers' Fire Insurance Co.

January 30, 1970

I LOSS HISTORY—As of Aug. 1, 1969

Policy Years	Cumulative Losses Incurred	Incurred Losses as % of Earned Premium
1962 thru 1967	$1,598,080	135%
1968	264,878	Not credible
1969	49,797	" "
Reserve-Unreported) Losses-Minimum) Basis-See Notes)	1,349,248	
All-time Total	$3,262,003	96%

II PREMIUM HISTORY—For limits of liability of $100,000/$300,000

PHYSICIANS No Surgery	Dade County Premium	Dade County Discount*	Broward County Premium	Broward County Discount*	Remainder of State Premium	Remainder of State Discount*
1962 thru 1965	$ 98.88	15%	$ 98.88	15%	$ 98.88	15%
1966 and 1967	103.00	10%	103.00	10%	103.00	10%
1968	130.00	9%	130.00	9%	130.00	None
1969	241.00	15%	136.00	19%	136.00	19%
1970	285.00	42%	168.00	65%	168.00	43%
1971—Anticipated#	446.00	10%	446.00	10%	263.00	10%
PHYSICIANS Minor Surgery						
1962 thru 1965	$ 98.88	15%	$ 98.88	15%	$ 98.88	15%
1966 and 1967	127.72	10%	127.72	10%	127.72	10%
1968	161.00	35%	161.00	21%	161.00	21%
1969	423.00	15%	238.00	19%	238.00	19%
1970	500.00	42%	295.00	66%	295.00	43%
1971—Anticipated#	777.00	10%	777.00	10%	463.00	10%
SURGEONS Class 3**						
1962 thru 1965	$234.84	15%	$234.84	15%	$234.84	15%
1966 and 1967	245.14	10%	245.14	10%	245.14	10%
1968	307.00	28%	307.00	12%	307.00	12%
1969	722.00	16%	408.00	19%	408.00	19%
1970	855.00	54%	505.00	73%	505.00	55%
1971—Anticipated#	1686.00	10%	1686.00	10%	1002.00	10%
SURGEONS Class 4**						
1962 thru 1965	$234.84	15%	$234.84	15%	$234.84	15%
1966 and 1967	366.68	10%	366.68	10%	366.68	10%
1968	459.00	19%	459.00	2%	459.00	2%
1969	962.00	16%	544.00	19%	544.00	19%
1970	1140.00	54%	673.00	73%	673.00	55%
1971—Anticipated#	2245.00	10%	2245.00	10%	1334.00	10%
SURGEONS Class 5**						
1962 thru 1965	$234.84	15%	$234.84	15%	$234.84	15%
1966 and 1967	366.68	10%	366.68	10%	366.68	10%
1968	459.00	35%	459.00	22%	459.00	22%
1969	1203.00	16%	678.00	19%	678.00	19%
1970	1425.00	54%	842.00	73%	842.00	55%
1971—Anticipated#	2809.00	10%	2809.00	10%	1667.00	10%

*The discount percentages shown are off the regular Bureau rates applying throughout the year shown. These figures do not include a further discount for Partnerships and Professional Associations arising from the practice of not applying a 20% extra charge for the partnership exposure.

For Partnerships and Professional Associations a 20% increase over the premium shown is anticipated.

**The surgeon classes shown are identified as follows:

Class 3—Composed of Cardiologists (including catheterization, but not including cardiac surgery), Ophthalmologists, Proctologists, and General Practitioners who perform major surgery.

Class 4—Composed of General Surgeons (specialists in surgery), Cardiac Surgeons, Otolaryngologists (no plastic surgery), Thoracic Surgeons, Urologists, and Vascular Surgeons.

Class 5—Composed of Anesthesiologists, Neurosurgeons, Obstetricians, Gynecologists, Orthopedists, Otolaryngologists (plastic surgery), and Plastic Surgeons.

Note: 1. The reserve for unreported losses is based upon the extensive lag in development of claims under this insurance. For a given policy year the claims are received in accordance with the following general schedule:

First year in force	— 6% of claims
First year after expiration	— 48% " "
Second year after expiration	— 80% " "
Third year after expiration	— 85% " "
Fourth year after expiration	— 95% " "
Next five years	— 5% additional

2. The reserve figure shown is described as minimum because it does not contemplate the effect of inflation or a possible "shock" loss over the period of exposure.

(1) A relatively modest increase of 23% in premium as of Jan. 1, 1970; (2) A one-year moratorium until Jan. 1, 1971 when an increase comparable to the Bureau companies is anticipated.

There appears to be no alternative to acceptance of this situation. It is our considered opinion that a high percentage of our members might be confronted with a problem more severe than that of premium cost were it not for a far-sighted Committee on Medical Economics which visualized and anticipated the current problems of professional liability insurance 15 years ago. Then efforts were commenced to establish an FMA-sponsored program of liability insurance. Even in those better days for the insurance industry it was not until 1961 that a start was made. The program today generally supplies the benefits originally sought by those members who initiated the establishment of this program.

Aside from other benefits, there has been a consistent cost advantage to our membership as compared to Bureau companies. A careful study of the premium history section of the "Statistical Data" will show the various and often substantial discounts obtained by our members as compared to Bureau premiums. To these discounts, Partnerships and Professional Associations can add an additional 20%—the Bureau partnership surcharge which has not heretofore been applied by the Employers' Fire Insurance Company.

Your Association is currently involved in legislative and other activity pointed toward the vital problem of claims control. These efforts will hopefully dampen if not control the steadily rising cost of this insurance.

▶ Dr. Babers, 903 Southwest 4th Avenue, Gainesville 32601.

Doctor Subsidy of Florida Medicaid?

James T. Cook, M.D.

The following article was published in the Winter 1970, Vol. 20, No. 1 issue of Florida Family Physician.—Ed.

Recently most of us received a questionnaire from the Florida Division of Family Services—not the FMA—asking in what way, if at all, we are willing to cooperate with Medicaid, Title XIX, beginning January 1, 1970. Although this questionnaire has now been tabulated, I think a few comments are still proper. I feel that I am free to speak as an individual, not as an officer of the FMA. The FMA House of Delegates has taken one stand on this matter, i.e., we shall have only one fee schedule, and that is the usual and customary fee. The Board of Governors has not seen fit to amplify this stand; certainly the Board could not change it.

Estimates are that the legislative bill implementing Title XIX allows $800,000 for medical services out of an estimated need of about 2½ million. Now we may disagree sometimes with our legislators, but not many of them are stupid. They knew that the funds were grossly inadequate. Furthermore, they carefully wrote into the bill a provision that no other state funds could be transferred to this use.

Also, they knew that the Social Security Administration would not approve Florida's implementing bill for Title XIX unless the Social Security Administration could be assured that the funds covering medical services would suffice to take care of these people for six months.

The legislature knew that the funds were inadequate; it made certain no funds could be transferred; they knew that the Social Security Ad-

ministration would not approve unless the doctors would accept the inadequate fees—which our House of Delegates had made clear we would not do. If Florida's Medicaid bill is not approved by the Social Security Administration it will cost the state millions in matching funds.

The Florida Division of Family Services (the old Welfare Department, sort of) is in a real bind. They feel they must make this work—they have been told to make it work in spite of inadequate funds. So they have to ask the doctors to submit to either approximately one fourth their usual fees, or to charge their usual fees and then work for nothing three fourths of their time after the funds are used up. We all saw this coming; I'm sure the legislature realized it also.

What if we allow them to pay us one fourth our usual fee? Probably the funds would be adequate. But we would have established the precedent that our fees are at the whim of legislative appropriation. I find it hard to believe that the legislature would ever correct the inadequacies—they knew from the beginning that it wasn't enough—it isn't as if they were completely in the dark about how much money to allot to this.

Well, if we don't wish our fees to be subject to the friendliness of each legislature, what about this once—for six months—we just care for these people free (which mostly we do already)? After the funds are used up, we work for nothing. Fine, except for two things: the Social Security Administration won't accept this unless we contract to do so. Second, once we accept these people in our offices, they are our patients and you can't move them back to the outpatient clinics without a good deal of rigamarole to avoid charges of patient desertion.

They tell me that our road program is far behind; no one has suggested that the contractors work for one fourth fee so that we can catch up.

We hear that our educational program needs just lots more money; no one has suggested that the builders and teachers should work for one fourth fee so we can catch up.

Medicaid might work. It has a lot of good points. But, if it doesn't, they're trying, I think, to make the doctors the "fall guys." Many of us foresaw this. There is only one reasonable and decent solution to this problem. Either at this or a subsequent special legislative session our state must ante up the necessary funds. There is absolutely no reason for the doctors to subsidize this—or any other program—more than do any other citizens.

▶ Dr. Cook, P.O. Box 860, Marianna 32446.

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Florida Medical | comment

A Medical Safari to Africa

Richard H. Schulz, M.D. and Sarah M. Schulz, M.D.

In early March 1969 my wife, Dr. Sarah M. Schulz, our oldest daughter and I left Marianna for New York City on the first leg of our trip to Africa. Before leaving passports had been obtained from the Miami Immigration Office with forms provided by our local County Clerk's office. This was one of the simpler procedures of the whole trip. Obtaining visas for various countries was more complicated and time-consuming. When traveling abroad, it is always wise to carry about a dozen passport-size photographs since many smaller countries require several for visa permits.

To enter South Africa the only immunization required is smallpox. Since we were also going to the Ivory Coast, yellow fever vaccination was necessary. After much difficulty, we finally received this vaccine in a small hospital in Salisbury, Rhodesia.

Leaving New York we flew to Dakar, Senegal, in West Africa. This was an eight-hour flight, yet only half way to our final destination, Salisbury, Rhodesia. From Dakar to Johannesburg was an all day trip; the plane stopped at numerous small capital cities. At each one we were advised that we would be allowed to leave the plane for approximately an hour; however, residents of South Africa had to remain aboard. Since the weather was quite hot and the plane on the ground like an oven, not being a South African on this particular journey was gratifying. South Africans are universally disliked throughout most of the continent. South African planes flying from Johannesburg to New York or England must follow a route over the ocean.

Adventure in Rhodesia

The first month was spent in Rhodesia, a country of 250,000 Europeans and 4½ million Africans. It is largely agricultural, growing corn, peanuts, tobacco, citrus and cotton. The government is attempting to establish a tea and coffee industry. Gasoline is rationed but any amount can be bought for a small increase in price. Since it costs approximately 90 cents per gallon, one sees few American cars. Smaller automobiles with economical motors are the principal means of transportation in the cities while the Land Rover and Volkswagen bus are used more in the bush.

After traveling three days, we arrived at a small mission hospital called Chikore in the southeastern portion of Rhodesia. The nearest city, Chipinga, is small and about 15 miles distant. The hospital is sponsored by United Church Board for World Ministeries with home offices in New York City. My cousin has been the attending physician for the past ten years. Chikore Hospital is a small brick structure with electricity provided only during the evening hours. It has 35 beds and an average census of 70 patients. This means several patients in or under each bed. Many sleep on the floor and out under the trees.

When a patient comes to the hospital, he brings members of his family with all their cooking utensils. All cooking is done behind the hospital in a small thatched hut. Patients pay an average of about 35 cents a day for hospitalization and medicines are extra. Major surgery costs approximately $6. An obstetrical delivery is $3. The collection rate is in the neighborhood of 80% to 90%. The hospital serves a large area of African natives of the Shona tribe. Very little English is spoken; however, at the mission school students are taught English—with a British accent.

The native diet consists largely of corn, roots, pumpkin leaves, guava, avocado, mango, bananas and occasionally meat. Since corn grows easily in the fertile soil, a lot of it is eaten. The corn is dried and ground into a powder, then cooked into

one big thick glob called "sadsa." Huge amounts are eaten at every meal; in fact, the meal seems incomplete without it. Balls of sadsa are dipped in hot sauce, plopped into the mouth and apparently swallowed without chewing.

Diseases Encountered

Probably the most interesting disease we encountered was kwashiorkor* in children.



Family members accompany the patient to the hospital and carry on their housekeeping in a small thatched hut behind the hospital. Note baby in the sling on the mother's back who is doing the cooking.



The typical family meal consists of sadsa and pumpkin leaves. Sadsa is dried corn ground into a powder and cooked to a thick consistency. Huge amounts are eaten at every meal.

*In the African dialect, "the neglected child."

When an infant is born, there is a great celebration in the family. A goat is killed and the skin used to make a sling in which the baby is carried on the mother's back. The baby feels her warmth and movements and throughout Africa one is immediately impressed by the happiness and contentment of these infants. This leaves the mother's hands free for long hours of hard work. During the first year the baby nurses from his mother's breasts and has an ample diet of protein. At the birth of another baby, he is immediately weaned and left more or less to shift for himself. His diet changes abruptly to one of corn and little protein. After several years the child becomes edematous, fretful, his hair turns yellow and his skin shows lack of vitamins A and B. The child becomes very anemic and his stomach bloated. Treatment for kwashiorkor is prolonged and consists of a high protein diet containing skimmed milk with lactic acid. Vitamins and iron also are given as well as treatment for the usual parasites. A child may appear to be doing well but any time during recovery pulmonary edema may become acute and death follow within hours. Small blood transfusions are occasionally given but are quite dangerous.

Other common diseases treated in the hospital are malaria, schistosomiasis and pneumonia, as well as crocodile bites, malnutrition, burns and obstetrical complications. Everyone appears to have malaria and all patients with headache and fever are given a round of chloroquine. In some areas the ova of schistosomiasis are found in the urine or stool of almost all people. While young they seem to tolerate the disease well but later in life there is a high incidence of carcinoma of the bladder.

Severe burns are rather common. There is a high incidence of untreated epilepsy in Africa and most of these patients seem to have burns. At night the epileptics sleep in a small hut around the fire and when afflicted by seizures may fling themselves into the fire. Other natives, being fearful of demons, refuse to help them. Frequently severe burns occur and as a result many epileptics have no hands or feet.

Complications

Obstetrical complications are quite common, since the African pelvis apparently is rather small. Whenever possible cesarean section is avoided. A difficult delivery frequently can be terminated by severing the symphysis pubis, allowing an extra centimeter or so for passage of the fetal head.

Delivery is then completed by use of a vacuum extractor of which Rhodesian doctors appear very fond. Because of the large caput produced on the fetal head, this has never become popular in the United States. I was anxious to learn the technique of symphysiotomy until I learned that about one out of ten women end up with an unstable pelvis following this procedure. I doubt that it will ever be popular in our country.

The first night in Rhodesia I mentioned to my cousin that I was interested in obstetrical complications. In the middle of the night we were awakened by a native who asked us to come to the hospital immediately. In the kerosene lamplit delivery room, we found an African native in obvious distress. She had been in labor three days and a fetal arm protruded through the vagina. It was gangrenous and swollen. She had been to the witch doctor and he had stuffed some leaves and straw into the vagina and tied a rock around her abdomen. This did not bring on delivery, and she was finally brought to the hospital. My cousin asked what we should do and I replied that she should have a cesarean section. He said, "Well, we can't do that here; what is your second choice?" We decided to attempt aversion. He would give the anesthetic and I would see if I could turn the baby. Since the patient was in shock, we administered demerol and intravenous fluids, dextran and plasma. While this was going on, it occurred to me that if the fetal head was severed we could accomplish the delivery without too much difficulty. My cousin agreed. I asked for a pair of scissors and had I known what they would be like I would never have attempted the procedure. Available were only a floppy pair of bandage scissors and some dull surgical scissors. Cutting through the fetal neck, I was able to get my finger around its circumference. After pulling down real hard and using a very dull scalpel, I finally completed the procedure. The baby's trunk and body were then easily delivered and the head followed after I had grasped it with sponge forceps. With considerable relief, we waited for the placenta, which failed to appear. Feeling into the uterus, I extracted what appeared to be the umbilical cord. It was the sigmoid colon. I then advised my cousin that a cesarean section was necessary.

The nearest hospital that could provide needed facilities was about 30 miles away. In a small Land Rover we loaded the patient, still receiving fluids in both arms, her husband, his other wife and two children, their pots and pans, and drove over 30 miles of the bumpiest road I have ever seen. We arrived at Mount Selinda Hospital at daybreak. The patient was immediately given several units of whole blood and under general anesthesia a supracervical hysterectomy was performed. The patient fully recovered without even a degree of fever. In retrospect, I believe if we had severed the fetal head with a Gigli saw the procedure would have been much less traumatic and we probably could have accomplished delivery without rupturing the uterus.

Differing Treatments

Another disease encountered was tropical ulcers. These usually begin as a scratch or pimple and grow larger, possibly to the size of a silver dollar. They are treated by adhesive strapping. A piece of elastoplast is placed over the ulcer and the patient is advised to return in one month. On his return it is almost astonishing to see how much tissue growth has taken place beneath the adhesive. Though this is good treatment for Africans, I have never found it very satisfactory in my private practice. Most patients will not leave a bandage on for this long a period. Contrary to popular belief, the Africans' resistance to infection is extremely low. Any little cut or scratch becomes infected. It was, however, a delightful experience to be able to give penicillin and other antibiotics without fear of allergies.

Almost all patients prior to coming to the mission hospital have been seen by a witch doctor, who charges a modest fee. Since the African believes all diseases are produced by evil spirits and demons, it is up to the witch doctor to decide



Tropical ulcers are treated by adhesive strapping. In one month the amount of tissue growth beneath the adhesive is almost astonishing.



A Biafran camp located in Abidjan, Ivory Coast. The temperature is more than 100 degrees.



In the Biafran children, incidence of umbilical hernia is very high. Surgical repair is never carried out because the hernia is considered a beauty spot.

which particular demon is at fault. Also, simple herbs are used to ward off evil spirits. Almost all children have a little bag of herbs tied around their necks, as is frequently seen in our rural practice in Marianna.

The patients were most grateful for any treatment and even when a patient died relatives made an effort to let you know they realized you had done the best you could. Malpractice insurance is unheard of; also a refreshing aspect of practice in this part of Africa is the high incidence of pathological findings. The average African would not think of spending 35 cents or walking 20 miles to see a doctor if he was not quite ill. Hypertension is very rare and myocardial infarction practically nonexistent. Neurotic complaints were encountered mainly in the better educated and those attending the local elementary school.

When a patient died, there was much mourning. It was considered very important to return the blanket on which the deceased had been sleeping and the utensils from which he had last eaten to the place of burial. Apparently in their burial practices, these are interred with the body.

Though the mission hospital was largely for the treatment of natives, some Europeans were treated there because the quality of medical care was superior to any other obtained in the nearby cities. My doctor cousin would occasionally go into Chipinga to administer anesthetics for a local surgeon. Rhodesian law states that only an M. D. may administer these agents to an European. A nurse anesthetist can serve for the natives.

Adventure in Biafra

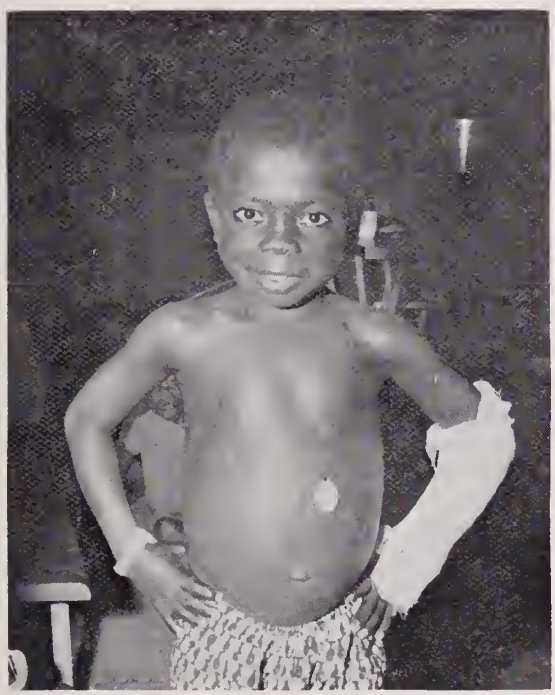
From Rhodesia we traveled to the Ivory Coast to treat the Biafran children. This portion of Nigeria lies just above the equator. The Biafrans are primarily Ebu and are considered one of the smartest native tribes in all Africa. When the nations of Western Africa were created, tribal boundaries were not taken into consideration. The Biafran civil war is one result of that mistake. Mercy flights go into Biafra at night and the children are taken out to Libreville, the capital of Gabon. Here they are kept in a French military hospital where probably 25% of them die. Once they are pretty well stabilized, they are evacuated, again by plane, to one of the Biafran camps in the Ivory Coast.

Upon arrival at Abidjan, Ivory Coast, we were greeted by Ed Barton, head of the Mercimed program sponsored by Columbia University Medical Center in New York. The camp in Abidjan had just opened and was receiving children from Gabon and another Biafran camp in the interior of the Ivory Coast, the city of Bouake. When we arrived the camp had 70 children; there were facilities for 300. While there we received children weekly from Gabon, and on our departure the camp was well filled.

The city of Abidjan is a thriving metropolis of 300,000 people and is largely French-speaking. The homes and residential areas are somewhat reminiscent of Miami Beach, and it is one of the most expensive cities in the world in which to live. When we arrived, we thought we would be local heroes since we had come to treat the

poor Biafran children. We soon learned otherwise. All Africa has its starving children and the Ivory Coast is no exception. The government is bringing in the Biafran children, giving them the best food and medical care. Natives of the Ivory Coast also have starving children and they resent this very much. We soon learned not to tell people we were working with the Biafrans. It was much simpler to say we worked with the Red Cross.

The children are transported from Gabon to the Ivory Coast by an organization called the Knights of Malta, a group of French rescue workers which has been in existence many centuries. Usually they are the elite nobility of France, and it was always a rewarding experience to see them fly in with a load of 50 Biafran children. After six hours in the air, the children were quite anxious to get off the plane. Many had to be helped since they were so frail and weak. Usually all the belongings for 50 children were brought in one small cardboard box. In spite of their lack of material wealth, they appeared to be the happiest children I have ever seen. At night they would have a singing session lasting for several hours. They sang in Ebu, but we learned that most of the songs were of a military nature, praising their leader in Biafra and the people of Gabon for helping them. One wonders what will become of these children. Probably they will never have a country. Most are orphans. One child in our camp had seen his parents beheaded while other family members watched helplessly.



Many fractures were encountered in a group of children this age. It was rather a unique experience to treat them without benefit of x-ray. The children appeared to be the happiest we have ever seen.

The Biafran children had nothing more than medical records and the shirts on their backs. In the camp they are fed an adequate diet of milk, eggs, meat, sadsa, fruit and fish. On arrival most are very malnourished and have the orange hair of kwashiorkor. The incidence of umbilical hernia is very high and surgical repair is never carried out because in Africa the umbilical hernia is considered a beauty spot, a portion of the anatomy to be proud of. The children speak Ebu but are rapidly learning French and English. Mainly we treated them for anemias, parasites, protein deficiency and the usual childhood diseases. Measles is a very virulent disease and may kill 10% of infants. We vaccinated for measles and gave DPT and polio immunizations. These are provided by UNICEF. In a group this age we encountered many fractures and it was a rather unique experience to treat them without the benefit of x-ray. It is surprising, however, how well one can do without this diagnostic tool.

Adventures End

Our Biafran adventure terminated one week early. We received an overseas cable stating that our oldest son had a two-bone fracture of the forearm which would require surgical reduction. Within 36 hours we were home and our African adventures were over.

Looking back over the whole trip I would have this to say: There is an inverse proportion of material wealth to happiness. The Africans seem to have nothing, yet are the happiest people I have ever seen. They know that during the summer they will eat well and during the winter they will starve. They know that a high proportion of their children will die, but certainly things are better for them now than ever before. They have no worries about country club dues, mortgages or automobile payments.

In summary, it was a very rewarding experience that I would certainly recommend for any doctor who has the time to make the trip. So often we talk about doing things like this but never quite get around to it. Finally, we wake up one day and find that time has passed us by. We can no longer do the things we always said we would do. I think if you really intend to do something of this nature you just have to make up your mind to do it and go ahead.

Interview with Drs. Richard and Sarah Schulz

Conducted by Albert Menendez

(Responses given by Dr. Richard Schulz, except where otherwise noted)

Basically, why did you go to Africa in the first place?

We were interested in Africa, the various countries, and the people and their customs. After 15 years of practicing medicine in Marianna, we finally had some time to make this journey.

Where did you first learn of the project in southern Rhodesia?

From my cousin who has worked there for ten years.

Where did you learn of the project to help the Biafran refugees?

From an article in *Medical World News* by Dr. Michael Reese of Brigham Hospital in Boston. Dr. Reese is the recruiter for this project, and through him we volunteered.

Were you frightened in any way or were you in any personal danger?

No, never. For one thing, we were far from the civil war battle zones. The only personal danger I encountered was the wild driving conditions and reckless drivers.

Did you see any evidence of civil war in Nigeria?

No, except for the rather heavy security arrangements at Lagos Airport; we noticed lots of soldiers and military planes.

How was the weather?

In Rhodesia the climate was ideal, being rather semitropical. We were at a 6,000 feet elevation which reminded me of the mountains of North Carolina. The air was clean and fresh and there was much tropical foliage. The Ivory Coast, however, was extremely hot and humid, which tended to slow down one's pace of work.

How was the food?

The food was surprisingly good and much better than I had anticipated. On the Ivory Coast the food was generally cooked in a French style. In Rhodesia the food was more simple but quite good and we especially enjoyed the fresh fruit such as pineapples and mangos.

What kind of clothing did you take with you?

We took primarily work clothes, white coats and uniforms. The dress was casual and informal, and most of our clothing was of the light summer variety such as khaki.

What was the reaction of the people to you?

It was especially warm and friendly in Rhodesia. The patients were appreciative and in fact we were given gifts and songs and dances in our honor when we left. Perhaps one reason for this gracious treatment was the respect accorded my cousin who has worked there many years. In Rhodesia we learned that "cousin" is almost the same as brother. In the Ivory Coast the natives were somewhat more suspicious and, as I wrote in my article, somewhat resentful of our program. In the long run, though, they seemed to appreciate our efforts.

How were you treated by the government officials?

We had no meeting with any government officials in Rhodesia, but we were guests of the government in the Ivory Coast.

How did you spend your leisure time?

In Rhodesia there were virtually no recreational activities except walking and reading. In the

(Continued on page 49)

Can one prescription do the work of two?



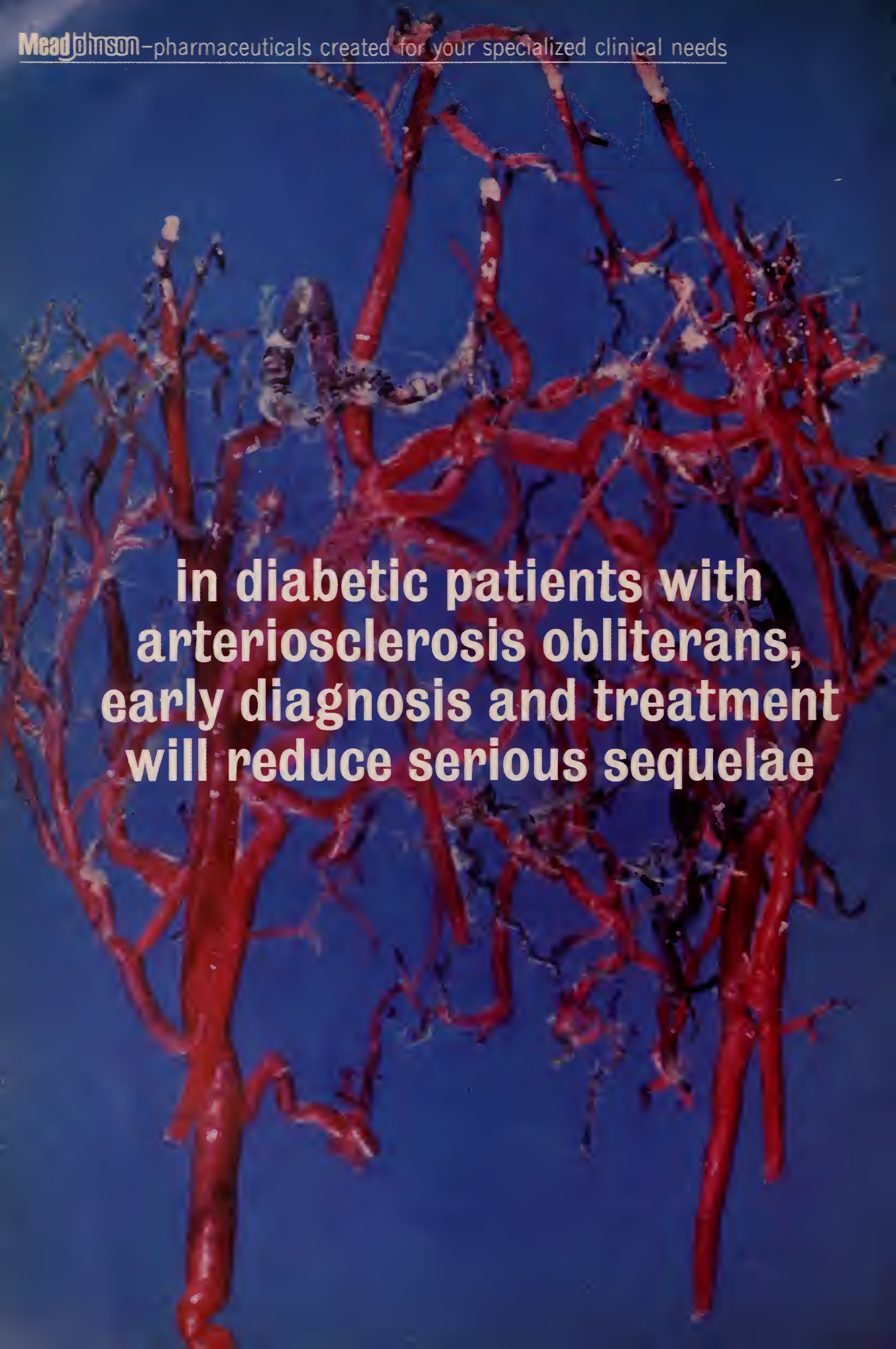
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Although not all clinicians agree on the value of peripheral vasodilators,[6-8] several investigators[4,5] have reported favorably on the effects of isoxsuprine on peripheral blood flow in skeletal muscle vessels. Effects have been demonstrated both by objective measurement[1,5,9] and observation of clinical improvement.[4,10-12]

Indications: Arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODILAN tablets, isoxsuprine hydrochloride 10 mg. **Dosage:** Oral—10 to 20 mg. (1 or 2 tablets) t.i.d. or q.i.d. **Contraindications and Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. As intramuscular administration of 10 mg. or more may cause brief hypotension and tachycardia, single intramuscular doses exceeding this amount are not recommended. Complete details available in product brochure from Mead Johnson Laboratories.

References: (1) Stein, I.D.: Angiology *15*:1 (April) 1964. (2) New Drugs—Evaluated by the A.M.A. Council on Drugs, Chicago, American Medical Association, 1967, pp. 295-297. (3) Samuels, S. S., and Shaftel, H. E.: J. Indiana M. A. *54*:1021-1023 (July) 1961. (4) Kaindl, F.; Pärtan, J., and Polsterer, P.: Wien.klin.Wchnschr. *68*:186-191 (March 16) 1956. (5) Kaindl, F.; Samuels, S. S.; Selman, D., and Shaftel, H.: Angiology *10*:185-192 (Aug.) 1959. (6) Myers, K. A.: Modern Treatment *4*:370-383 (March) 1967. (7) Gillespie, J. A.: Angiology *17*:280-288 (May) 1966. (8) Smit, Arne, F., *et al.*: Nordisk Medicin *20*:1260, 1959. (9) Samuels, S. S., and Shaftel, H. E.: JAMA *171*:142-145 (Sept. 12) 1959. (10) Frieh, C., and Olivier, L.: Lyon Med. *91*:891-896 (May 24) 1959. (11) Weghaupt, Von K.: Wien.klin.Wchnschr. *69*:31-32 (Jan. 11) 1957. (12) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960.

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Microphoto of occluded vessels in gangrenous area of a first toe amputated because of severe arteriosclerosis obliterans. Cast was made by injecting acrylic plastic into the vessels. *Used with permission. Courtesy of Margaret C. Conrad, Ph.D., Department of Physiology, Bowman-Gray School of Medicine, Wake Forest College, Winston-Salem, N. C.*

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Ivory Coast, however, we especially enjoyed the markets, which is "where the action is." Here we bought material, cloth, fresh pineapples and mangos, and generally enjoyed the colorful atmosphere. We also enjoyed the beautiful beach and saw some films at the American Embassy.

What do the natives do in their spare time?

They enjoy going to market, soccer, checkers, hunting, and all kinds of music activities.

Did you see any evidence of resentment by the black people of Rhodesia concerning Prime Minister Ian Smith's racial policies?

We didn't notice much resentment expressed, but the natives seemed to be patiently waiting and seemed to feel that history was on their side. The primary concern of most black Rhodesians is simply survival.

What kind of education did the medical personnel that you encountered have?

Most of the doctors were Europeans, while most of the native physicians were also educated in Canada, Britain, or continental Europe. We did notice a medical school in Abidjan.

What about the nurses?

We were very impressed by the ability of the nurses with whom we worked. Most were natives and some were Europeans. The nurses seemed to assume responsibility, worked closely with the doctors, and seemed to have more freedom of movement.

How are the church-related missionary enterprises doing?

They do not seem to be doing as well as they used to be and most seem to be having financial difficulties. The most significant activities are related to the Biafran relief programs.

What European influences still remain?

European influences are numerous and widespread, especially the British and French. The food, language, education, religion, and products are all still heavily influenced by western Europe.

What other groups are doing medical missionary work?

UNICEF is very active and involved, and maintains an effective immunization program. The World Health Organization also maintains some clinics. In general, then, the United Nations provides many humanitarian services.

What is the United States government doing about Biafra?

Nothing official that I know of. The United States does not recognize Biafra, but I think we have provided some airlift assistance.

What did people you encountered think of America and Americans?

I don't think they were really impressed by the United States. They seemed somewhat suspicious and wary of Americans, but I do think they appreciated our efforts in the long run.

What is the family unit like?

Men are dominant, and often have many wives. Large families are the rule and there seems to be little education in the field of family planning or birth control. The World Health Organization clinics help with family care, but there is still a very high infant mortality rate.

What were some of the things you noticed that would be of interest to women?

(Dr. Sarah Schulz)—I was fascinated by the different styles of dress worn by the African women. In Rhodesia, for example, they were rather poorly dressed, with simple and almost tattered clothing. In the Ivory Coast, however, the women wore beautiful, stylish, colorful clothing made out of beautiful material. All of the different native groups had unique hair styles. One impression that I had was that conditions were not as primitive as I had anticipated.

What, if anything, would you do differently if you took this trip again or a similar one in the future?

I would try to learn some French before I went to Africa, and I would try to learn some of the native language if I knew that I would be in one place for a reasonable length of time. I would also secure a universal driver's license.

▸ Drs. Schultz, Box 857, Marianna 32446.

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swelling, and tenderness

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IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended under Indications. The drug should not be prescribed for children because safe conditions for use have not been established.

General Adverse Effects: Because of the high potency of the drug and the variability of its potential to cause adverse reactions, the following are strongly recommended: 1) the lowest possible effective dose for the individual patient should be prescribed. Increased dosage tends to increase adverse effects, particularly in doses over 150-200 mg /day, without corresponding clinical benefits; and 2) careful instructions to, and observations of, the individual patients are essential to the prevention of serious and irreversible, including fatal, adverse reactions, especially in the aging patient.

Indications: Symptomatic relief of adult rheumatoid and degenerative joint disease unresponsive to adequate trial of salicylates and other measures of established value, such as appropriate rest. Has been found effective in active stages of: 1) moderate to severe rheumatoid arthritis including acute flares of chronic disease, 2) moderate to severe rheumatoid (ankylosing) spondylitis, and 3) moderate to severe degenerative joint disease of the hip (osteoarthritis of the hip). Has been found effective in relieving pain and reducing fever, swelling, and tenderness in acute gouty arthritis in selected patients. May enable reduction of steroid dosage in patients receiving steroids for the more severe forms of rheumatoid arthritis; in such instances the steroid dosage should be reduced slowly and the patients followed very closely for any possible adverse effects.

Contraindications: Children 14 years of age and under; pregnant women and nursing mothers; active gastrointestinal lesions or history of recurrent gastrointestinal lesions; allergy to aspirin and indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at times, severity of gastrointestinal reactions, be continuously alert for any sign or symptom signaling a possible gastrointestinal reaction. The risks of continuing therapy with INDOCIN in the face of such symptoms must be weighed against the possible benefits to the individual patient. Gastrointestinal effects may be reduced by giving the drug immediately after meals, with food, or with antacids. Use greater care in aging patients.
Ocular Effects: Corneal deposits and retinal disturbances, including those of the macula, have been observed in some patients on prolonged therapy. Discontinue therapy if such changes are observed. Ophthalmologic examination at periodic intervals is desirable in patients on prolonged therapy.
Central Nervous System Effects: INDOCIN (Indomethacin, MSD) may aggravate psychiatric disturbances, epilepsy, and parkinsonism, and should be used with considerable caution in patients with these conditions. If severe CNS reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants a thorough ophthalmologic examination. Patients should be cautioned about engaging in activities requiring mental alertness and motor coordination, as driving a car. Headache which persists despite dosage reduction requires complete cessation of the drug. May mask the usual signs and symptoms of infection; therefore, the physician must be continually on the alert for this and should use the drug with extra care in the presence of existing controlled infection. After the acute phase of the disease is under control, an attempt to reduce the daily dose should be made repeatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations of the esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage, with fatalities in some instances; gastrointestinal bleeding without obvious ulcer formation; perforation preexisting sigmoid lesions (diverticulum, car noma, etc.); rarely, increased abdominal pain ulcerative colitis patients or development of cerative colitis and regional ileitis; gastrit which may persist after the cessation of t drug; nausea, vomiting, anorexia, epigastric d tress, abdominal pain, and diarrhea.
Eye Reactions: Corneal deposits and retinal d turbances, including those of the macula, ha been observed on prolonged therapy; blurring vision.
Hepatic Reactions: Rarely, toxic hepatitis a jaundice, including some fatal cases.
Hematologic Reactions: Aplastic anemia, hem lytic anemia, bone marrow depression, agranu cytosis, leukopenia, and thrombocytopenic p pura. Since some patients manifest anemia se ondary to obvious or occult gastrointestin bleeding, appropriate blood determinations a recommended.
Hypersensitivity Reactions: Acute respiratory d tress, including dyspnea and asthma; angiit pruritus; urticaria; angioedema; skin rashes.
Ear Reactions: Hearing disturbances, deafnes tinnitus.
Central Nervous System Reactions: Psychotic e sodes, depersonalization, depression, coma, co vulsions, peripheral neuropathy, drowsines mental confusion, lightheadedness, dizzines headache.
Cardiovascular-Renal Reactions: Edema, elevati of blood pressure, hematuria.
Dermatologic Reactions: Loss of hair, erythen nodosum.
Miscellaneous: Rarely, vaginal bleeding, hype glycemia, glycosuria, ulcerative stomatitis, a epistaxis.

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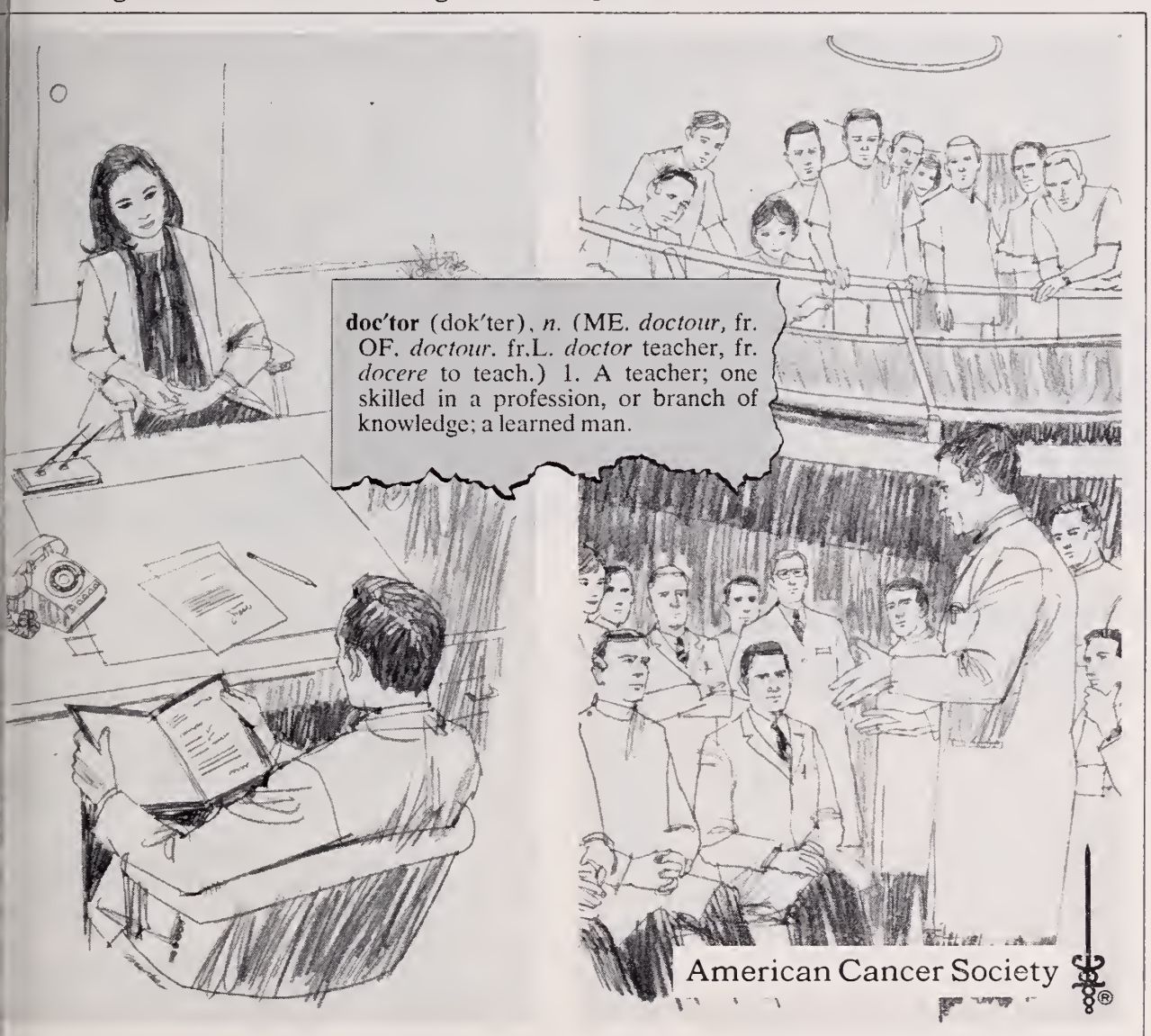
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Side Effects: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.
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Florida Medical meetings

FMA Approved Postgraduate Meetings

MARCH

6 Leukemia-Lymphoma Seminar for Physicians, Sheraton Hotel, Tampa. For information contact: J. N. Patterson, M. D., Chairman, American Cancer Soc., Fla. Div., 2909 Bay-to-Bay Blvd., Tampa 33609.

11-14 Second Teaching Conference in Clinical Cardiology, Sheraton-Four Ambassadors Hotel, Miami. For information contact: Michael S. Gordon, M. D., Jackson Memorial Hospital, Miami 33136.

12-14 Problems in Modern Pediatrics, University of Florida College of Medicine, Department of Pediatrics, Gainesville. For information contact: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

14 Advances in Management of Coronary Artery Disease, Watson Clinic Medical Symposium, Watson Clinic, Lakeland. For information contact: John F. Flanagan, M. D., Watson Clinic, Lakeland 33802.

19-20 Cardiology Symposium, Orange Memorial Hospital, Orlando. For information contact: Clarence M. Gilbert, M. D., 215 E. Jackson St., Orlando 32801.

25-28 Trends in Clinical Radiology, Fontainebleau Hotel, Miami Beach. For information contact: Manuel Viamonte Jr., M. D., Box 875, Biscayne Annex, Miami 33152.

27-28 "A Day of Cardiac Pathology With Jesse E. Edwards, M. D.," University of Florida, Gainesville. For information contact: Div. of Postgraduate Education, J. Hillis Miller Health Center, Box 758, Gainesville 32601.

APRIL

16-18 Pulse of Laboratory Medicine, Tides Hotel and Bath Club, Redington Beach (St. Petersburg). For information contact: M. A. Barton, M. D., 701 - 6th St., S., St. Petersburg 33701.

25 Fourth Annual Seminar on Diagnosis and Management of Cancer, Port-O-Call Resort Inn, Tierra Verde, St. Petersburg. For information contact: John Carbonneau, 2909 Bay-to-Bay Boulevard, Tampa 33609.

MAY

13-16 Greater Miami Pediatric Society Seminar, Jackson Memorial Hospital, Miami. For information contact: Retha Schiess, M. D., 7001 Galloway Rd., Miami 33143.

14-16 Current Cancer Concepts, 20th Annual Postgraduate Seminar, Mount Sinai Hospital of Greater Miami, Miami Beach. For information contact: Harold Glick, M.D., Public Relations Office, Mount Sinai Hospital, Miami Beach 33140.

DECEMBER

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information contact: Arthur Gosselin, M. D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings in Florida

MARCH

14-18 American Society of Abdominal Surgeons Clinical Congress, Deauville Hotel, Miami Beach. Ex. Sec.: Blaise F. Alfano, 675 Main St., Melrose, Mass. 02176.

16-20 American College of Allergists, Americana Hotel, Miami Beach. Ex. Vice Pres.: Mr. Eloi Bauers, 2100 Dain Tower, Minneapolis, Minn. 55402.

19-24 American Dermatological Association, Boca Raton Hotel, Boca Raton. Sec.: Barrett Kennedy, M.D., Louisiana State University Medical School, 1542 Tulane Ave., New Orleans, La. 70112.

20-21 Society for Clinical Ecology, Americana Hotel, Miami Beach. Sec.: Robert Collier, M.D., 4045 Wadsworth Blvd., Wheat Ridge, Colo. 80033.

APRIL

12-16 American Proctological Society, Diplomat Hotel, Hollywood. Adm. Sec.: Miss Harriette Gibson, 320 W. Lafayette, Detroit, Mich. 48226.

19-20 American Otological Society, Hollywood Beach Hotel, Hollywood Beach. Sec.: W. H. Bradley, M.D., 1100 E. Genesee St., Syracuse, N.Y. 13210.

20-21 American Broncho-Esophagological Association, Hollywood Beach Hotel, Hollywood Beach. Ex. Sec.: John R. Ausband, M.D., Bowman Gray School of Medicine, Winston-Salem, N.C. 27103.

21-23 American Laryngological, Rhinological and Otological Society, Hollywood Beach Hotel, Hollywood Beach. Sec.: L. E. Silcox, M.D., 108-111 Lankenau Medical Bldg., Philadelphia, Pa. 19151.

23-24 American Society for Head and Neck Surgery, Hollywood Beach Hotel, Hollywood Beach. Sec.: Edwin W. Cocke Jr., M.D., 899 Madison Ave., Memphis, Tenn. 38103.

24-25 American Academy of Facial Plastic and Reconstructive Surgery, Hollywood Beach Hotel, Hollywood Beach. Sec.: Carl N. Patterson, M.D., 1110 W. Main St., Durham, N.C. 27701.

24-25 American Laryngological Association, Hollywood Beach Hotel, Hollywood Beach. Sec.: Frank D. Lathrop, M.D., Rt. #1, Pittsford, Vt. 05763.

27-May 2 American Academy of Neurology, Americana Hotel, Miami Beach. Ex. Dir.: S. A. Nelson, 4005 W. 65th St., Minneapolis, Minn. 55435.

MAY

1- 5 Association for Research in Ophthalmology, Sheraton Sandcastle, Sarasota. Sec.: Herbert E. Kaufman, M.D., University of Florida College of Medicine, Gainesville 32601.

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn, M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F. Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

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Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
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Florida Organizations of Medical Interest Meetings and Officers

Organization	President	Secretary	Annual Meeting
orida Medical Association	Henry J. Babers Jr., Gainesville	Floyd K. Hurt, Jacksonville	Hollywood, May 6-10, 1970
Florida Specialty Societies			
lergy Society	Melvin Newman, Jacksonville	Roger A. Lipton, Ft. Lauderdale	
nesthesiologists, Soc. of	Franklin B. McKechnie, Winter Pk.	George T. Edwards, Ft. Lauderdale	
nest Phys., Am. Coll., Fla. Chap.	Howard M. Dubose, Lakeland	Richard A. Elias, Miami	
ermatology, Society of	Richard S. Flatt, Sarasota	Arnold R. Goddard, Miami	
astroenterologic Society	Charles E. Aucremann, St. Pet'sb'g	James H. Johnson, Lakeland	
eneral Practice, Academy	Edward G. Haskell Jr., Tallahassee	Joseph P. Hendrix, Port St. Joe	
ternal Medicine	W. Roy Hancock, Jacksonville	Victor H. Knight Jr., Tampa	
eurology, Florida Society of	Francis L. Merritt Jr., Lakeland	James B. Perry, Ft. Lauderdale	
eurosurgical Society	Jack W. Barrett, Miami	Howard C. Chandler, Jacksonville	
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phthalmology Society	Ralph E. Kirsch, Miami	Curtis D. Benton Jr., Ft. Lauderdale	
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ublic Health Association	Mr. Miles T. Dean, Tallahassee	Mr. Embree A. Walker, J'ville	Clearwater, Oct. 8-10, '70
etarded Children, Association	Mrs. Theodore Norley, W. P. B.	Mr. Leonard Stafford, Pensacola	Orlando, Fall 1970
horacic Society	Tscheng S. Feng, M.D., W. P. B.	Richard G. Connar, M.D., Tampa	Orlando, Apr. 30-May 1, '70
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oman's Auxiliary	Mrs. C. Herbert Gilliland, G'ville	Mrs. Lloyd K. Netto, W. P. Bch.	Hollywood, May 6-10, '70

(Most Specialty Group meetings are scheduled at the time of the annual meeting of the Association)

Florida Medical classified

physicians wanted

General Practitioners

EXCELLENT OPPORTUNITY for general practitioner in community of 15,000; central Florida; 76-bed JCAH hospital. Write or call collect R. C. Thompson, Bartow Memorial Hospital, Bartow, Fla.

FAMILY PHYSICIAN WANTED to join established family physician (pediatrics and general medicine) in rapidly growing residential area. AAGP member or eligible preferred. Lovely waterfront community with excellent professional atmosphere. Will guarantee $20,000 first year. Contact: Fred O. Smith, M.D., 1015 Bartelt Rd., Tarpon Springs, Fla. 33589.

GENERAL PRACTITIONER WANTED: For private practice, pleasant surroundings in Jacksonville area. Seventy-five bed county hospital adjacent to modern office building with two colleagues. Write C-842, P.O. Box 2411, Jacksonville, Fla. 32203.

IMMEDIATE OPENING: GP desires office associate. Salary and percentage with minimum guarantee of $24,000 per year. Adequate office space with two excellent area hospitals. Central Florida location midway between two coasts. Phone (813) 453-3121 or write C-917, P.O. Box 2411, Jacksonville, Fla. 32203.

FAMILY PHYSICIAN WANTED: GP or internist wishing to practice in the Clearwater-Largo-Indian Rocks areas, please write P.O. Box 1841, Clearwater, Fla. 33535.

WANTED: M.D. to do general practice in fast growing community to join corporate group with profit-sharing and pension trust fund. Have 60-bed JCAH hospital. Guaranteed salary $24,000. Must have Florida license. Contact John M. Canakaris, M.D., Box 727, Bunnell, Florida 32010. Phone (904) 437-3354.

GENERAL PRACTITIONER: For opening in long established multispecialty group. Must have Florida license and completed military obligation. Contact Jerome J. Coffey, M.D. or John F. Kerwick, Business Manager, Hollywood Clinic, P.O. Box 2308, Hollywood, Fla. 33022. Phone (305)923-4646.

Specialists

INTERNIST WANTED: For private practice netting $24,000 yearly. Pleasant surroundings in Jacksonville area. Seventy-five bed county hospital adjacent to modern office building with two colleagues. Write C-871, P.O. Box 2411, Jacksonville, Fla. 32203.

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PSYCHIATRIST WANTED-NEEDED: To continue county solo nine-year practice terminated by sudden death. Office, furniture, files, patients ready, waiting. Local hospital psychiatric facility newly completed. Contact Mrs. Frederick L. Patry, 5912 Riverview Blvd. W., Bradenton, Fla. 33505.

INTERNIST WANTED: Subspecialty desirable but not essential. Military obligation completed, Florida board, to join two certified internists in S. E. Florida. Early partnership. Write C-935, P. O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: Board eligible or certified, married, military service completed to form the third man of a busy, growing internal medical practice. Cardiology subspecialty preferred. Suburban Miami area. Write Louis D. Bennett, M.D., 3829 Hollywood Blvd., Hollywood, Fla. 33021.

Miscellaneous

WANTED: Pediatrician, internist, anesthesiologist, general practitioner in 27-man multispecialty group located Florida Gulf coast. Progressive, rapidly growing community with abundance of recreational and cultural opportunities. Clinic affiliated with 200-bed accredited hospital with immediate and long range expansion plans. No investment required. Contact D. M. Schroder, Adm., Mease Hospital and Clinic, Dunedin, Fla. 33528.

PHYSICIAN FOR EMERGENCY SERVICES: In Florida medical center. 700-bed expanding facility on Gold Coast. Florida license required. Staff of 7. Competitive fee schedule with excellent benefit program. Contact Administrator, Broward General Medical Center, 1600 S. Andrews Ave., Ft. Lauderdale, Fla. 33316. Phone (305)525-5411.

POSITIONS OPEN: For salaried staff in west central Florida. Two internists (one as medical director), general surgeon, general practitioner, ob.-gyn. and psychiatrist. Accredited 169-bed county hospital. Approved rotating internship (6 interns) and approved four year residency in general surgery (jointly with Lakeland General Hospital). Can employ without Florida license. If foreign medical graduate, must have E.C.F.M.G. certificate. Contact John F. Dominick, M.D., Director of Medical Education, Polk General Hospital, Bartow, Florida 33830. Phone (813)533-1111.

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ADDITIONAL PHYSICIANS NEEDED: For association, group or solo practice. Fields of practice in short supply: GP, allergy, dermatology, geriatrics, internal medicine, obstetrics and pathology. Two hospitals in county of rapid growth. Contact Carl N. Reilly, M.D., 304 Nesbit St., Punta Gorda 33950. Phone (813)639-1758.

PRIVATE EMERGENCY SERVICE PHYSICIANS: Applications from Florida licensed physicians are being considered to fill vacancies. Duties include direct patient care to private patients, and participation in the education and supervision of residents and interns assigned to emergency service. Submit resume to Assistant Director, Ambulatory Services, Mount Sinai Hospital of Greater Miami, Miami Beach, Fla. 33140.

DIRECTOR OF MEDICAL EDUCATION: To replace retiring incumbent. Growing medical center (666 beds) on Florida's Gold Coast. Prefer board certified specialist who will obtain Florida license. Contract available for competitive salary and benefit program. Send resume, availability and salary requirements to Administrator, Broward General Medical Center, 1600 S. Andrews Ave., Ft. Lauderdale, Fla. 33316.

situations wanted

RADIOLOGIST: Experienced in therapy, nuclear medicine and diagnostic radiology desires to locate in Florida. Have Florida license. Write C-939, P.O. Box 2411, Jacksonville, Fla. 32203.

GENERAL SURGEON: Board certified, licensed in Florida 1968. Desires association with another surgeon or group in a coastal city of central or southern Florida. Write C-855, P.O Box 2411, Jacksonville, Fla. 32203.

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EXCELLENT PRACTICE OPPORTUNITY: G.P. leaving for residency. Fully equipped, plush office in beautiful residential suburb of Fort Lauderdale, in fastest growing area of the country. Phone 731-7038.

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County Medical Societies of Florida

SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	TOTAL MEMBERS Associate	Active
Alachua *Bradford, Gilchrist, Union*	George T. Singleton, Gainesville	George A. Dell, Gainesville	2nd Tues.	59	154
Bay	James A. Poyner, Panama City	John F. Mason Jr., Panama City	1st. Tues.	1	36
Brevard	Donald M. Bryan, Rockledge	Edwin E. Hadden, Cocoa Beach	2nd Tues.	10	162
Broward	Leonard A. Erdman, Ft. Lauderdale	Daniel C. Smith, Ft. Lauderdale	4th Tues.	116	484
Charlotte	Arno von Ruckteschell, Punta Gorda	Charles M. Wilson, Port Charlotte	2nd Tues.	0	16
Clay	E. Charlton Prather, Orange Park	Robert W. Knapp, Orange Park	4th Tues.	1	13
Collier	Donald M. Mosher, Naples	Hoke H. Shirley Jr., Naples	3rd Wed.	0	43
Columbia	Don W. Weiffenbach, Lake City	Joseph I. Benefield, Lake City	3rd Wed.	0	14
Dade	Rufus K. Broadaway, Miami	Richard C. Dever, Miami	1st Tues.	323	1,617
DeSoto-Hardee-Glades	Calvin W. Martin, Arcadia	Elmer J. Schmierer, Arcadia	1st Tues.	2	16
Duval	James W. Walker, Jacksonville	John A. Rush Jr., Jacksonville	1st Tues.	52	446
Escambia	L. V. Tyler Jr., Pensacola	W. A. Covell, Pensacola	2nd Tues.	15	132
Franklin-Gulf	Photis Nichols, Apalachicola	Shirley Simpson, Port St. Joe	Last Wed.	1	5
Highlands	Walter M. Ost, Avon Park	Julio Sanguily Jr., Sebring	3rd Mon.	1	24
Hillsborough	James M. Ingram, Tampa	Rodney D. Steinmetz, Tampa	1st Tues.	55	362
Indian River	David Tingle, Vero Beach	James G. Punches, Vero Beach	2nd Tues.	5	29
Lake	Malcolm A. Cox, Leesburg	Thomas H. Nichols, Clermont	1st Wed.	1	45
Lee-Hendry	Wade H. Garner, Ft. Myers	Francis Howington, Ft. Myers	3rd Mon.	20	78
Leon-Wakulla-Jefferson	George N. Lewis, Tallahassee	Edward G. Haskell Jr., Tallahassee	1st Mon.	23	88
Madison	William J. Bibb, Madison	Julian M. DuRant, Madison	1st Tues.	0	5
Manatee	Joseph E. Duke, Bradenton	C. Kenneth Phillips, Bradenton	2nd Tues.	5	63
Marion **Levy*	Edwin H. Updike, Ocala	C. Brooks Henderson, Ocala	3rd Tues.	10	50
Monroe	Jaime M. Benavides, Key West	Ronald H. Chase, Key West	1st Thurs.	3	23
Nassau **Baker*	Cecil B. Brewton, Fernandina Bch.	John B. Britton, Fernandina Beach	2nd Thurs.	4	8
Okaloosa	Howard A. Parker, Shalimar	T. D. Laughlin, Ft. Walton Beach	1st Wed.	0	30
Orange **Osceola*	Thomas B. Thames, Orlando	Clarence M. Gilbert, Orlando	3rd Wed.	67	366
Palm Beach	James R. Brandon, W. Palm Beach	D. L. Van Eldik, Lake Worth	4th Mon.	41	319
Panhandle	Herbert E. Brooks, Bonifay	Glenn E. Padgett, Marianna	1st Thurs.	1	33
Pasco-Hernando-Citrus **Sumter*	Samuel R. Miller, Crystal River	J. W. Basinger, Dade City	2nd Thurs.	0	32
Pinellas	Douglas W. Hood, St. Petersburg	Joseph A. Ezzo, St. Petersburg	1st Mon.	85	418
Polk	Spencer R. Garrett, Lakeland	John C. Moore Jr., Lakeland	2nd Wed.	17	208
Putnam	George M. Zeagler, Palatka	Claude M. Knight, Palatka	2nd Tues.	2	13
St. Johns	Milton Segal, St. Augustine	V. A. Lockwood, St. Augustine	3rd Tues.	0	21
St. Lucie-Okeechobee-Martin	John F. Powers, Stuart	John B. Sullivan, Ft. Pierce	3rd Thurs.	3	50
Santa Rosa	Elbert W. Sutton, Milton	Claude J. Barnes, Milton	2nd Tues.	0	14
Sarasota	William F. Mahoney, Sarasota	Norman J. Gengler, Sarasota	2nd Tues.	18	131
Seminole	Charles Hardwick, Sanford	John M. Morgan, Sanford	2nd Tues.	0	31
Suwannee-Hamilton-LaFayette	Hugo Sotolongo, Live Oak	Leo F. Klenk, Jasper	1st Sat.	0	7
Taylor **Dixie*	John H. Parker, Perry	John A. Dyal, Perry	Last Fri.	0	7
Volusia **Flagler*	Richard W. Dodd, Daytona Beach	Bob Bullwinkel, Ormond Beach	2nd Tues.	6	134
Walton	Charles J. Roehm, DeFuniak Springs	Howard F. Currie, DeFuniak Springs	3rd Tues.	0	8

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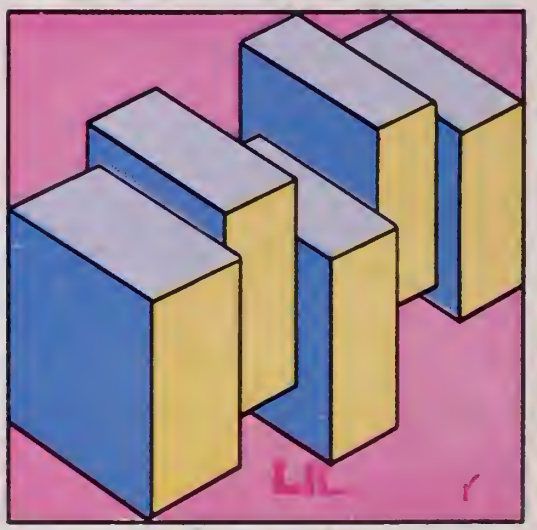
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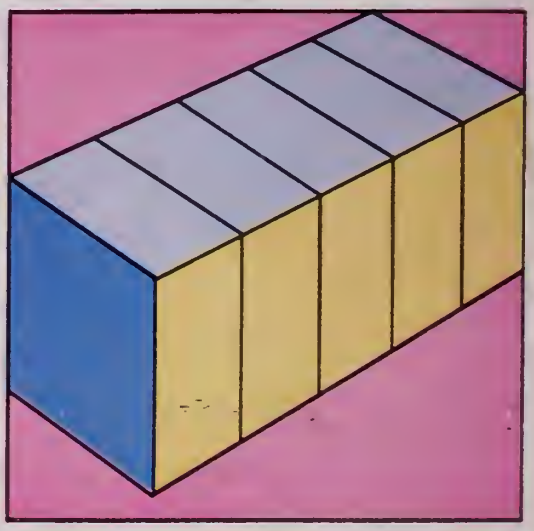
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from the discord of anxiety

to emotional harmony

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CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
PRECAUTIONS: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
ADVERSE REACTIONS: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido--all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy

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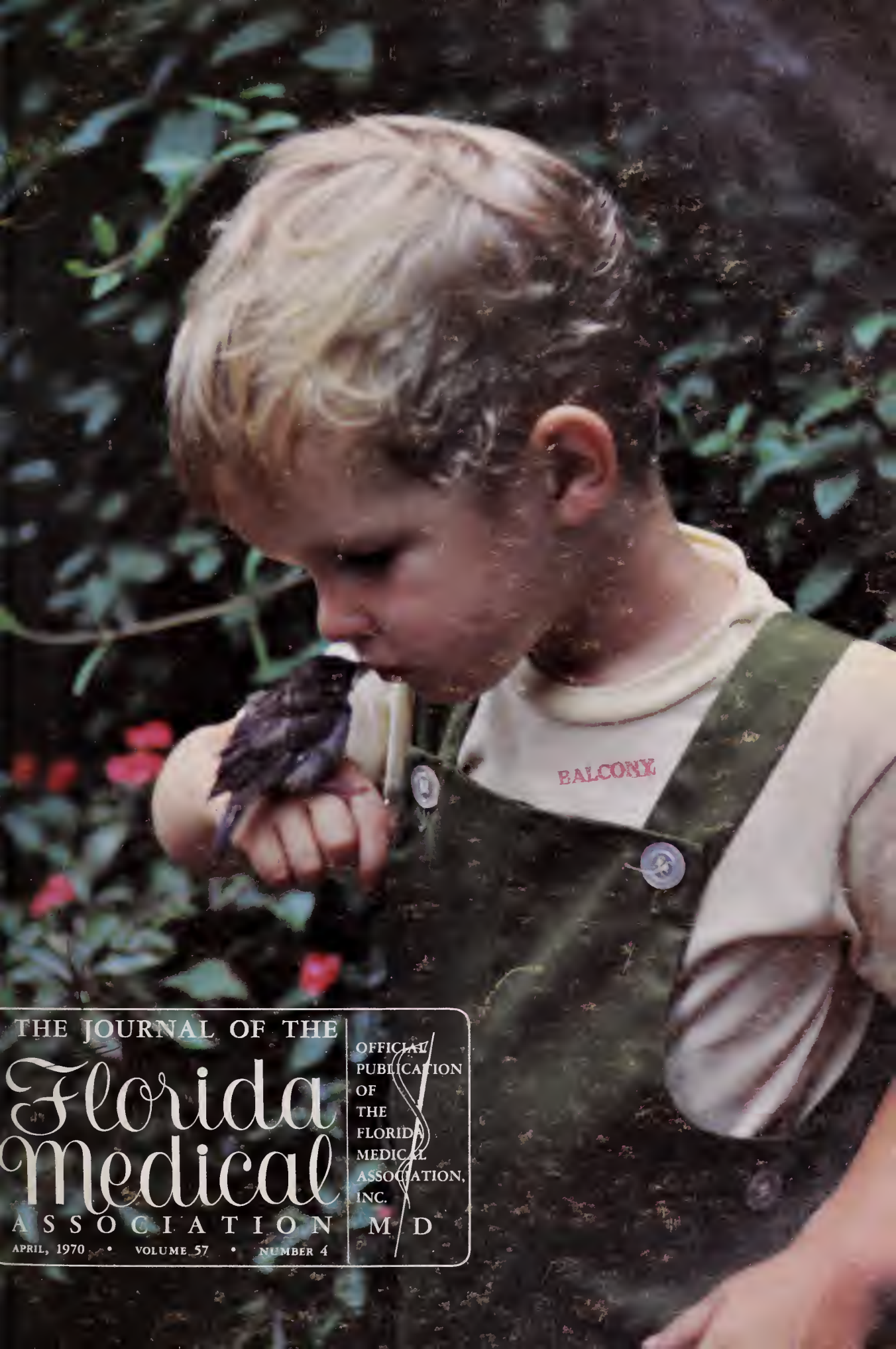
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APRIL, 1970 • VOLUME 57 • NUMBER 4

The girth control pill



Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride)

works on the appetite not on the 'nerves'

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Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

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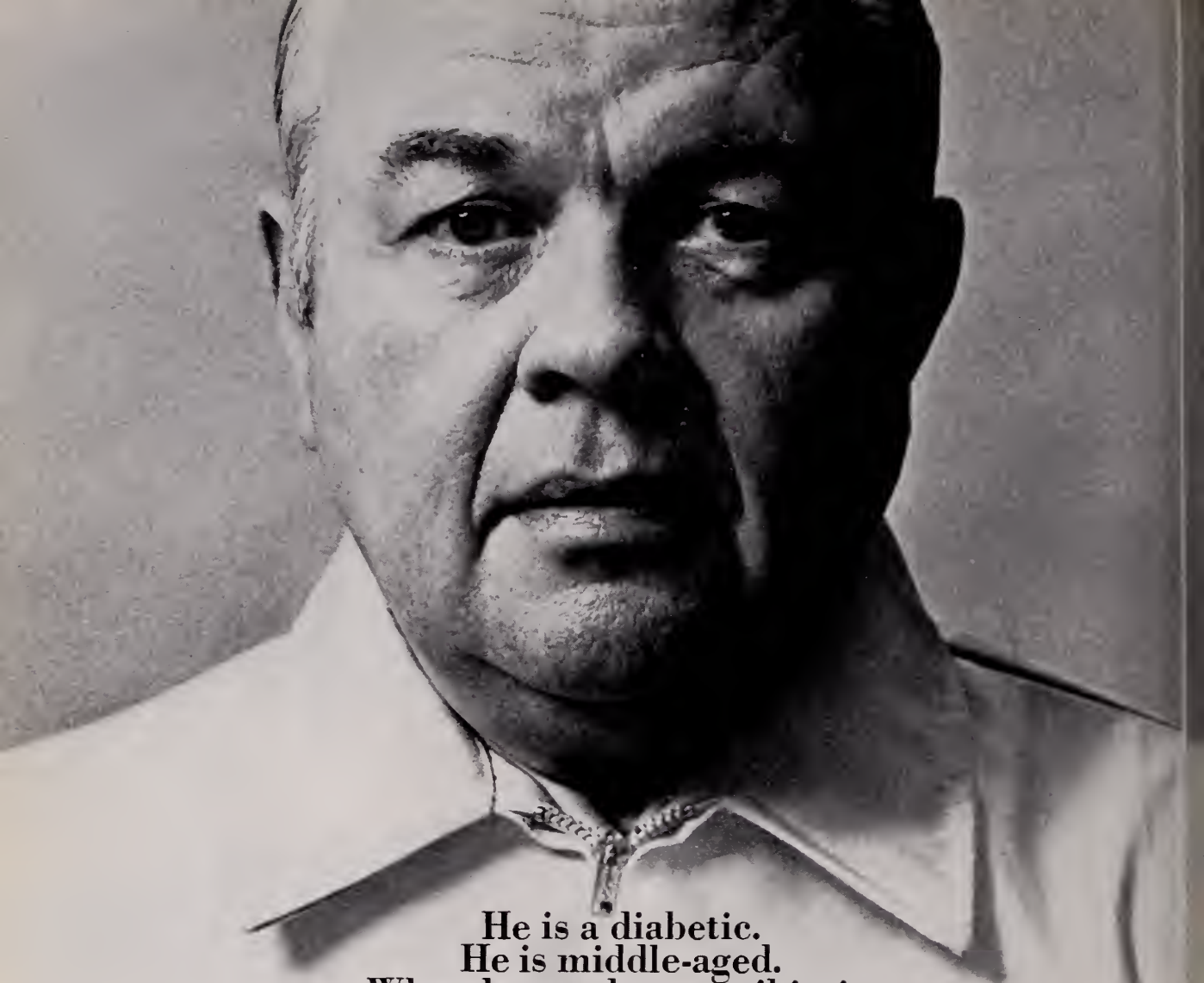
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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. on stant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, arrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Transient increase in urinary output, sometimes accompanied by thirst (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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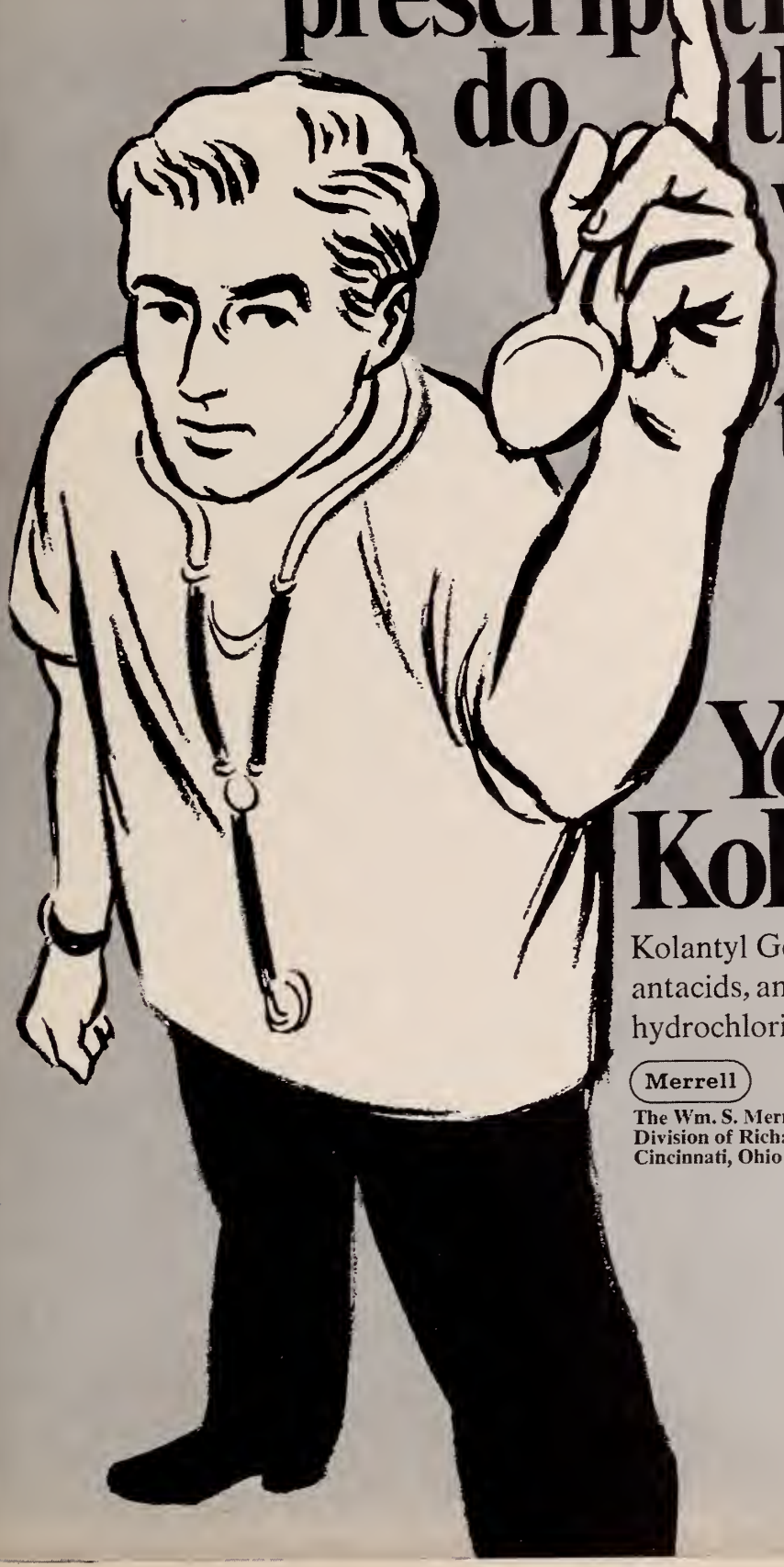
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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

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Our Younger Generation

Recently in Washington, D. C. an excellent educational meeting was put on by the American Medical Political Action Committee (AMPAC). I attended this by invitation and was very impressed. This convinced me that AMPAC and our own FLAMPAC should be strongly supported. These organizations are very necessary for education and action in the political arena if our democratic legislative process is to function properly in this country. Ask your FLAMPAC leaders in Florida about this meeting.

While I was waiting for one of the programs to get started some of the problems confronting all of us today flashed through my mind. With a sort of flight of ideas I suddenly realized that my only method of staying sane was simply to do the best I could and live each day at a time. Solutions to problems refused often to present themselves; certainly I had no ready answers. I admit I'm confused; the whole world is in the grip of a mass hysteria of tremendous proportions. Who is sane and who isn't is a problem in itself.

In my flight of ideas I thought of the young people and our modern hirsute generation. I read somewhere recently that one man said of his son, "Everything he eats seems to turn to hair." One can hardly escape the relationship of hair to our youth. When we look at some of our young people all one can think of is a vague outline of a face peering from behind a bush. We all know there is nothing wrong with beards; it is what they stand for that is important. The other day I looked over pictures of our past presidents of the FMA. From 1874 through 1899, 19 out of 24 were bearded. My thoughts turned then to cleanliness. Ah, there is a difference! Many of our hairy youth look clean, are clean and smell all right. Others look and smell like wild men or goats. I doubt if a high odor was ever popular, at least since man had the facilities to get clean. Disheveled hair, poor personal hygiene, and a rancid odor were never attractive.

I guess I will never understand; someone will have to explain things to me. The world is on a mass hysterical binge and may blunder thereby into a frightful accident. I'm sure that harmful drugs are wrecking many young lives. The number one problem of my generation is alcoholism, which pervades our lives without generating the same frenetic resistance. I have hopes that our youth will lead us and themselves out of this hysterical state. To date I am confused and hope and pray that somebody knows what to do.

Most of our young people are intelligent and attractive. Part of the generation gap, at least for me, is physical: the process of my getting older. A teenager can read in a poor light better than I can because his visual acuity is better. I listen to teenage conversations without comprehension; the words sound like the wind blowing gently through the trees, but they understand each other well. Their hearing is sharper. I envy the young people and hope that by the time experience has taught them some of the age-old truths, they will be further along the way to a full and happy life than my own generation.

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References: 1. Olsen, J. R.: Journal-Lancet 85:287 (July) 1965. 2. Lechevalier, H.: Antibiotics Annual 1959-1960. New York, Antibiotica, Inc., 1960, pp. 614-618. 3. Giorlando, S. W., Torres, J. F., and Muscillo, G. Am. J. Obst. & Gynec. 90:370 (Oct. 1) 1964. 4. Friedel, H. J.: Maryland M. J. 15:36 (Feb.) 1966.

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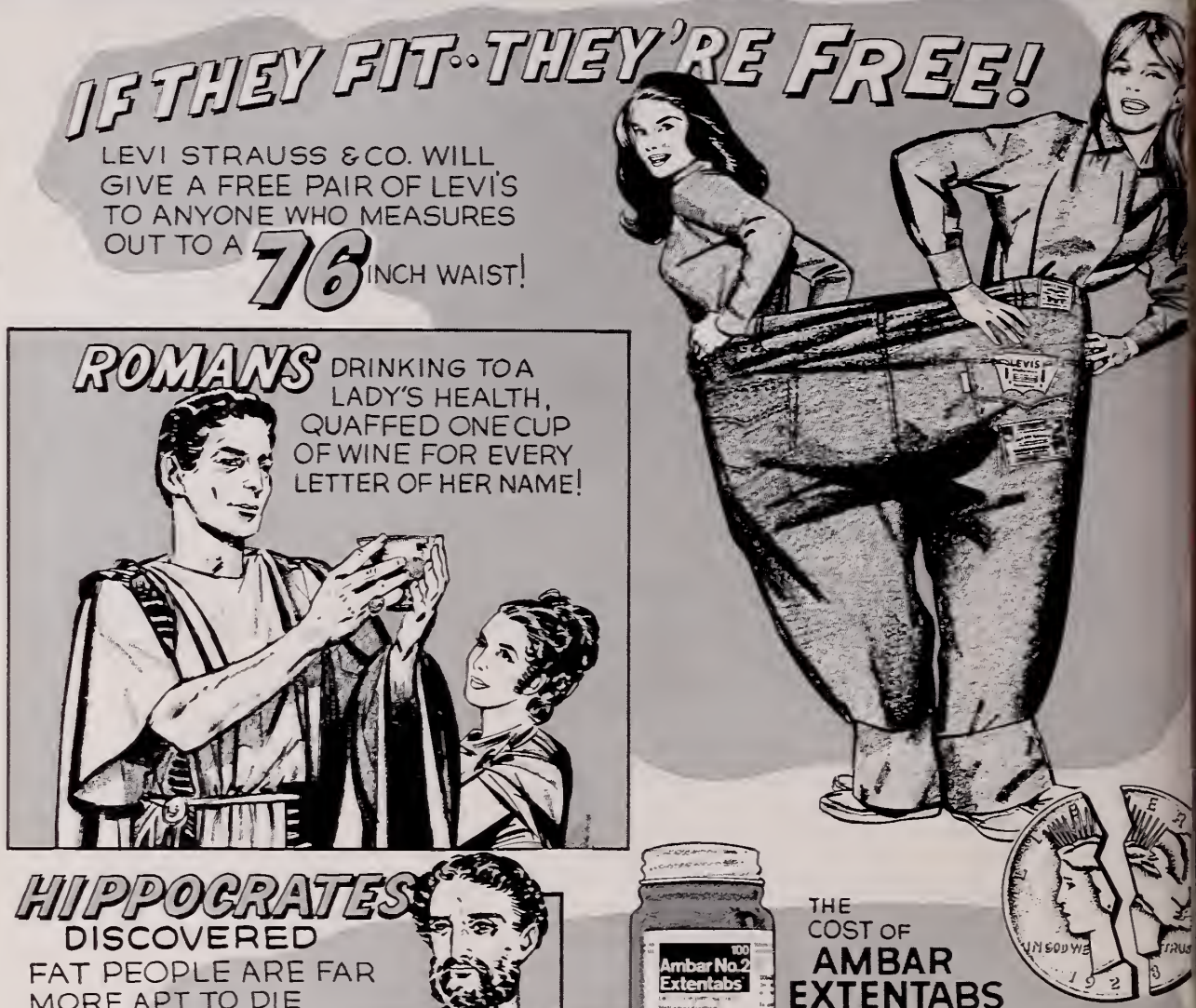
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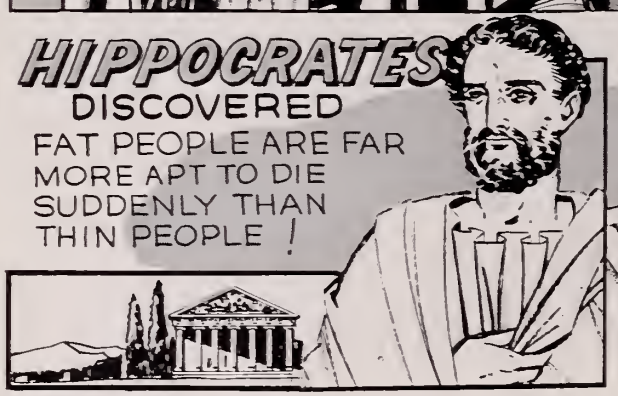
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Pseudoneurotic Schizophrenia

Asa L. Godbey Jr., M.D. and Jorge R. Guerra, M.D.

Sigmund Freud warned: "Often enough, when one sees a case of neurosis with hysterical or obsessional symptoms, mild in character and of short duration (just the type of case, that is, which one would regard suitable for treatment) a doubt which must not be overlooked arises whether the case may not be one of incipient dementia praecox, so-called (schizophrenia according to Bleuler; paraphrenia, as I prefer to call it), and may not sooner or later develop well-marked signs of this disease."[1]

As did Freud, generations of psychiatrists recognize patients whose behavior and symptomatology demonstrate an impairment of ego function not found in psychoneurotics. These patients are quite ill, but not overtly psychotic. They exhibit some of the classical clinical symptoms of schizophrenia (though these may be less striking and intense than in the "schizophrenic") and a host of neurotic symptoms and mechanisms. The majority do not develop a more classical schizophrenic syndrome.

In 1949 Hoch and Polatin coined the term "Pseudoneurotic Schizophrenia."[2] Hoch and Cattell based the diagnosis of pseudoneurotic schizophrenia on the finding of several so-called "primary symptoms" of schizophrenia in conjunction with a special type of secondary symptomatology.[3] While acknowledging the artificiality of the compartmentalization of human behavior, Hoch and Cattell subdivided the characteristic disturbances of thinking and association and of emotional regulation (referred to as the "primary symptoms" of schizophrenia) to make possible a simplification of the evaluation process.

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Primary Symptomatology

Disorders in the process of thinking and association include: (1) the relating of ideas despite incongruities of time, place or person (for example, after having sexual advances accepted by a blonde, one might conclude that all blondes are equally receptive); (2) the simultaneous acceptance and rejection of an idea (ambivalence); (3) disturbances in goal-directed thought (such as tangentiality—the oversensitivity to irrelevant stimuli with the intrusion of these stimuli into the thought process); (4) disorders in thought flow (such as "blocking" or "pressured thinking"); (5) disorders in awareness and concentration (confusion, detachment), and (6) disorders in the process of concept formation.

Disorders in thought content include: (1) the domination and rigid maintenance of concepts based on inadequate and distorted percepts ("father was a tyrant and had gray hair, therefore all gray-haired men are tyrants"—note here the content disorder resulting from a process disturbance); (2) distorted concepts of self and body image; (3) rigid and distorted concepts of the meaning and utilization of intellect, emotion and behavior, with all problems being approached as soluble by intellect, without emotion.

There are disorders in the form of emotional regulation, such as: (1) the simultaneous awareness of polar emotions (love and hate, joy and sorrow); (2) a low threshold for experiencing and responding to anxiety; (3) emotional volatility and heterogeneity of emotional responses, with no apparent relationship of feeling to the consciously recognized situation; (4) inertia in initiating, sustaining and terminating emotional responses; (5) impairment of the ability to select and regulate

aggression; (6) latency in the conscious recognition of emotional reactions (often of such duration as to perplex and frighten the individual because of the inability to relate the response to the provoking stimulus), and (7) somatization of emotional responses.

Disorders of emotional content are prominent. There is: (1) diffuse anxiety in almost every area of behavior; (2) poor tolerance of tension, with urgency for immediate need fulfillment but lack of satisfactory relief once the supposed fulfillment has been effected; (3) a lack of experiencing of feelings with a keen awareness of a lack of pleasurable gratification of needs; (4) impairment of empathy, with a resultant withdrawal from others, and (5) intellectualization of emotions.

Sensorimotor and autonomic functioning are also disordered. The individual: (1) experiences motor clumsiness and awkwardness in speech, especially in unfamiliar situations; (2) exhibits exaggerated somatization of emotional reactions, and (3) may exhibit marked energy dysregulation, with unexplainable bursts of energy or attacks of fatigue. Motor or sensory patterns (tics, paresthesias) are often substituted for disturbing thoughts or feelings.

Secondary Symptoms

The so-called "secondary symptoms" of pseudoneurotic schizophrenia are pan-anxiety, pan-neurosis and pan-sexuality.

The anxiety is diffuse and all-pervasive, subjectively experienced almost constantly despite a host of defensive symptoms and maneuvers. It may intensify or diminish abruptly without apparent relationship to external circumstances. There may be massive anxiety responses to relatively minor stimuli, and the anxiety may persist long after the stimuli have ceased.

Several different types of neurotic symptomatology may be present, including obsessions, compulsions, phobias, hysteria with dissociation and depersonalization. In contrast to the psychoneurotic, the symptomatology may shift or may even assume delusional character. A secondary depression clearly related to the intensity and persistence of the illness usually accompanies these neurotic symptoms.

Another type of symptomatology manifests itself in acting-out, antisocial or drug-dependent behavior and is often designated as one or another type of character disorder. The acting-out or antisocial behavior may be impulsive or carefully planned, aggressive or sexual. Schmideberg has written extensively about the "borderline" patient with antisocial behavior, referred to by some as the "pseudopsychopathic schizophrenic." She characterizes them as lacking in depth of feeling, empathy or consideration for others. They are said to lack the power of concentration, perseverance and the willingness to make a steady effort, and to have a low tolerance for frustration. They are oversensitive to criticism, and overreact to the setbacks they bring on themselves with excessive self-pity, leading to broken work records and poor social relations. They "like to cultivate a sense of being wronged because it justifies their non-social attitude." Periods of acting-out alternate with periods of deep depression, anxiety and withdrawal. Immediate pleasure is used to take the place of the personal relation—"the pleasure must be immediate and excessive because there are no happy memories and little hope or sense of continuity or forepleasure."[4]

The term "pan-sexuality" designates the behavioral manifestations of the chaotic sexual functioning of the pseudoneurotic schizophrenic patient. Every conceivable variation of stimulus or sensory and motor activity is pursued in fact or fantasy. Homosexuality, bisexuality, Don Juanism, nymphomania, compulsive masturbation, pedophilia and bestiality are all encountered. The behavior is pursued in an effort to relieve sexual anxiety, but the frantic nature and diversity of the efforts give an indication of their lack of success. The sexual behavior is also used as a means of attempting to deal with problems of identity and emotional control and discharge, as well as in an attempt to relate to others. The pattern of behavior is quite varied, but the quality is impaired either during the act or after it due to shame, guilt or anxiety. These patients often seek therapy on the basis of some deviant type of sexual behavior.

Clinical Description of Patients

Many of the dysfunctions mentioned as primary symptomatology can occur in "normal" individuals. However, the frequency, intensity and duration of such symptoms is of crucial importance in evaluating the relative degree of psychopathology. In the schizophrenic patient many of these symptoms are to be regarded as defenses against anxiety. As anxiety increases the symptoms become progressively more dominating to the point of becoming disabling. The secondary

symptoms of pseudoneurotic schizophrenia seem to occur as a reaction to a progressive failure of anxiety control through the primary symptoms.[3]

In capsule, the pseudoneurotic schizophrenic or borderline patient is one in whom diffuse, all-pervasive anxiety is dominant. Neurotic symptoms are prominent. Depression or apathy is common. Frequent brief, transient, comparatively minor losses of contact with reality (e.g., disproportionate problems with authority figures such as employers) can be noted. The patient reintegrates himself spontaneously from these episodes of "micropsychosis." Anhedonia, a frequently overlooked characteristic, is often one of the most troubling symptoms experienced by the patient. These people seldom have any experiences regarded by them as pleasureful. This probably accounts for the intense sexual experimentation and common drug use. The incidence of pseudoneurotic schizophrenia is unknown. It rarely ushers in a "full-blown" schizophrenia, and is not to be regarded as a pre-psychotic condition.

Diagnostic Methods

When considering the therapy of the pseudoneurotic schizophrenic patient one must keep in mind that the patient's ego* is laboring badly. Such ego functions as integration, concept formation, judgment, realistic planning and control of the eruption of threatening impulses into conscious thinking have been, in some cases, severely impaired. Other ego functions such as superficial conventional adaptation to the environment may exhibit varying degrees of intactness, and still others, such as memory, may seem unimpaired. The clinical picture may be dominated by neurotic symptoms which may enable the patient to present a deceptively conventional neurotic front. Several interviews may be needed to provide the physician with a sufficient appraisal of total ego functioning, and to provide the patient with a sufficient sense of security to permit verbalization of his more disturbing self-observations. Occasional blocking, peculiar word usage, inappropriate feeling tone, and suspicion-laden behavior and questions are a few examples of betrayals of ego impairment of possibly psychotic degree. The appraisal of ego functioning can be more precise if the physician takes careful note of the degree of patient acceptance of the manifestations of ego impairment. A lack of concern about the realities of his life predicament, low-voltage wishes for help, and the fact that the illness developed with minor stress are macroscopic evidences of ego weakness. On the other hand, signs of embarrassment about symptoms, attempts at correction of peculiarities of verbal expression, and joking when voicing suspicions are evidences of ego-intactness.[5]

Diagnostic psychological tests combine the advantages of a structured supportive setting in which there are no "correct" answers to indicate to the patient what he is revealing or concealing. The Rorschach is probably the most sensitive test for autistic thinking, and the Word Association and Sorting tests are most valuable for detecting the loosening of associations and the disruption of concept formation. The Thematic Apperception Test is useful in giving a picture of what the patient's images are of himself and his own "significant others" and what he feels he and these people are doing to each other. Intelligence tests may show excellent preservation of intellectual functioning, indicating a degree of ego strength. A balanced battery of tests can provide the range of responses which will permit accurate appraisal of total ego functioning.[5]

In all diagnostic methods, then, the aim should be to take a complete inventory of ego functioning in order to discover the kind of equilibrium existing between ego controls and threatening impulses, and to learn whether the movement in the patient is toward less ego control and poorer adaptation. This qualitative appraisal of ego functioning is perhaps more important than the quantitative one. Even severely neurotic defenses may become reintegrating forces leading, for example, to a shift away from grossly disturbed thinking processes to fairly well-organized compulsive striving with marked improvement in the defensive and adaptive aspects of ego functioning.[5]

Therapy of Patients

It is important to make the patient aware of his disturbances in thinking and judgment in a way that does not undermine his self-confidence. The malfunctioning must be pointed out in great detail, and the patient taught step by step how to handle each situation more to his advantage. He should be allowed to become gradually aware of how others see him and how he provokes favorable or unfavorable reactions in others. In this way, he may be able to recognize cause-and-effect relations and cease to function and feel like a pawn in his life's events.[4]

*That part of the psyche which possesses consciousness and recognizes and tests reality.

The main thing is to get the patient moving. His failure to act may not always be due to inhibitions; sometimes it is a primary failure to have learned how to act. By finding the right incentives, the therapist can often induce the patient to embark on a new course of behavior. The satisfaction of having acted, often by doing something he has known for some time he should do, of getting the desired results, and of pleasing the therapist will serve to reinforce the behavior and to induce further efforts at more adaptive ways of behaving. Adjustment to please the therapist is not necessarily of temporary value only, though there is a tendency to disparage such early movements because they may not last—may represent a "flight into health." They may or may not be lasting, but if the therapist disparages them they are sure to be crushed, and sometimes the patient does not recover from the disappointment. Improvement gives hope and stimulates effort, and it is on these initial and often fleeting improvements that the more permanent ones are built. Thus, the "flight into health" may get up a long chain of beneficial reactions. Analytically-oriented psychiatrists are often uncertain in their own minds as to whether it is desirable for symptoms to disappear, but to the patient symptoms may constitute intense suffering, and are certainly not to be mourned in their passing. It makes little difference how the patient is originally motivated as long as he begins to behave in a fashion that in the long run is to his advantage.[4]

In attempting to introduce new behavior, the patient's family can often be utilized, both to keep the therapist cognizant of the patient's behavior, with the patient's full knowledge and approval, and to effect changes in his environment. Contact with the family often allays their fears as the patient begins to experiment with new behaviors, thereby improving the set in which the changes are to be tried. However, psychiatric patients often have difficult families, and the therapist must carefully assess the family members as he sets up a program for his patient. Even when a patient's home life is unsatisfactory, there is no justification for encouraging him to leave home unless he has some other situation upon which he can depend. The patient may have such abnormal behavior that nobody but his family would put up with him. Then, too, the separation may produce a loneliness that outweighs even the family's undesirable traits.[4] This is a point often overlooked in hospitalizing patients of all kinds, and must definitely be kept in mind when considering hospitalization for the pseudoneurotic schizophrenic patient, especially if his acting-out behavior is likely to intensify his loneliness by producing hostility from or rejection by the staff.

We have presented this condensation and attempted simplification of a complex subject for that very reason—its complexity. Our institution receives the bulk of its patients in referral. Due to the difficulty in recognition of this syndrome these patients are frequently referred to our psychiatric outpatient department as "long-standing neuroses" or to the medical department for evaluation of "crocky" somatic complaints. A thorough evaluation of ego functioning plus close attention to subtle evidences of disordered thinking can lead to early recognition and consequently to more realistic therapeutic goals, or to earlier psychiatric consultation, and less frustration to the patient and to the physician.

Summary

A brief simplified review of the literature of a complex problem is presented. The authors' intent is to alert the practicing physician to the subtle manifestations of disordered thinking which are often obscured by neurotic symptomatology.

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editorial comment

CLYDE M. COLLINS, M.D.

When the preceding paper, in manuscript form, was sent to me with an urgent request for an editorial comment, I thought that some mistake had been made but a hurried phone call assured me that such was not the case. Now in the past year and a half, requests for contributing anything to the JOURNAL have always been eagerly received as a challenge and a labor of love, usually being on subjects about which I know a little and so can contribute a thought or two. One look at the title of this paper, however, left me awe-struck for fear that I could not even understand it, much less intelligently comment on it. For in 15 years of practicing general surgery, my few ventures into the field of psychiatry have been on a friendly but casual relation with my colleagues in that specialty and the encountering of an occasional neurotic patient when working in emergency rooms around town. Rereading the title, I experienced "disorders in awareness and concentration." But by dint of perseverance and frequent references to my unabridged Webster's dictionary, I had, at the end of the first reading, controlled the disorders and absorbed enough to begin experiencing that well known contagious phobia of a student in his first clinical year of medicine.

At the second reading, my confidence in having made this self-diagnosis was shaken by having found no real evidence of "disorders of the process of thinking or in thought content, emotional regulation or emotional content." Not being particularly articulate, however, and sometimes experiencing "bursts of energy and attacks of fatigue," with "a very low tolerance for frustration," especially after losing sleep several nights in a row, gave me the sickening thought that perhaps I could be a borderline case. At these times, I am "overly sensitive to criticism," as well as "lacking the power of concentration" and, remembering my high school world of fantasy, I was haunted by my original premise, that perhaps I could be a pseudoneurotic schizophrenic. Then comprehending the sentence that many of these dysfunctions occur in normal individuals and reading on, that *anhedonia,* or the incapacity for experiencing happiness, is a symptom, I realized that I didn't have the disease. On the third reading of the paper, I was rather pleased that I had regained some powers of concentration as definitions of half-forgotten terms became more clear and I experienced a self-satisfied sense of having learned something new.

In all seriousness, the paper is clearly written, the thoughts orderly organized and the conclusions logically developed. I recommend it to all JOURNAL readers and trust that the authors will continue to contribute to medical literature. The next time, however, that I am backed into hospitalizing a "crocky" patient, and after running the gamut of diagnostic procedures without finding any organic disease, the patient is discharged, I just might sign out the chart, not acute anxiety state, but pseudoneurotic schizophrenia. Won't that raise the eyebrows of the girls in the record room!

▶ Dr. Collins, 1503 Oak Street, Jacksonville 33204.

A Nine Year Experience With Cervical Cancer

James W. Daly, M.D.

To accept responsibility for treatment of genital cancer carries the obligation to periodically review and report the experience. This concept of introspective evaluation sometimes substitutes diligence for complacency and may also be a factor in elevating survival while reducing complications.

The department of obstetrics and gynecology of the University of Florida College of Medicine began accepting patients in January, 1959. The treatment of cervical carcinoma was a function of the gynecology and radiotherapy services; five different gynecologists and four radiotherapists have been responsible for therapy over the years. For the first two years no radiotherapy equipment was available.

The purpose of this report is to review our experience, and that of the author at another institution. The total data involve 444 patients with carcinoma of the cervix.

Materials and Methods

The first analysis pertains to patients treated at the University of Florida Teaching Hospital primarily and those referred with persistent or recurrent disease. The charts of all individuals seen with cervical carcinoma were reviewed and with the aid of the tumor registry follow-up was 99%. Most of the patients were followed in the gynecology tumor clinic, and a few by their local physicians. Appropriate information was available on all. Carcinoma-in-situ of the cervix is not included in this analysis.

Between January 1, 1959 and December 31, 1967, 301 patients were evaluated. Of this number, 206 were referred for primary therapy and 95 with persistent or recurrent disease. Nineteen of the 206 patients were not treated. For the purpose of reporting results in primary therapy, those treated between 1959 and 1964 will be presented as alive or dead through 1967. This time span allows at least a three year survival rate.

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In 1959 and 1960, patients treated by radiotherapy were referred to other therapy centers. In 1961 a 2 million volt Van de Graf x-ray machine became available. This was used together with a variety of radium systems until December 1964. At that time a CO^{60} unit was put into operation and the Fletcher system of radiotherapy for genital malignancy was adopted.[1] Radical hysterectomy was performed according to the technique described by Te Linde.[2]

Results

Table 1 indicates the type of therapy by stage of disease. It will be seen that approximately 50% of Stage 1 patients were operated upon. Most had a radical hysterectomy and only a few a simple hysterectomy for microscopic invasion.

Table 1.—Type of Treatment by Stage of Disease, Carcinoma of the Cervix, University of Florida, 1959-1967.

Stage	Total	Radiation	Surgery
1	73	39 (53.4%)	34 (46.4%)
2	78	74 (94.8%)	4 (05.2%)
3	29	29 (100%)	0 (0%)
4	7	5 (71.4%)	2 (28.6%)

The survival through 1967 of those treated between 1959 and 1964 is presented in Table 2. These data give at least a three year follow-up and are informative for purposes of gauging results. It will be noted that there is no significant difference in survival between Stage 2 and Stage 3. Ten patients died of inter-current disease and three were lost to follow-up; these latter patients were considered to have died of tumor.

A list of complications through 1967 is presented in Table 3 together with the method of therapy. The complications are for the entire group of treated patients. Proctitis and cystitis were included when these conditions required hospitalization and persistent treatment.

The complication rate was 27.8% (52/187 patients). An analysis of complications by stage of disease and mode of therapy is presented in Table

Table 2.—Survival Through 1967, Carcinoma of the Cervix, University of Florida, 1959-1967.

Stage	Types of Treatment	Alive 3 Years	Treated	3 Year Survival
1	Radiation	20	26	76.9%
	Surgery	16	20	80.0%
	Total	36	46	78.2%
2	Radiation	16	35	45.7%
	Surgery	2	4	50.0%
	Total	18	39	46.1%
3	Radiation	7	16	42.4%
	Surgery	0	0	00.0%
	Total	7	16	42.4%
4	Radiation	0	5	00.0%
	Surgery	1	2	50.0%
	Total	1	7	14.2%

4. The rectal and bladder fistulae occurred in Stage 2 and 3, primarily where the disease was massive. Vault necrosis occurred in ten patients and this complication proved to be a serious one; it must be identified early and treated vigorously. If left unattended, it not infrequently leads to fistula formation and pelvic scarring which in turn may compromise the ureters. In patients with Stage 1 disease, 10 of 39 (25.6%) treated with radiation had significant complications; with surgery 11 of 34 (32.3%).

Of the 95 patients referred with persistent or recurrent disease, 52 (55%) were not treated because of far advanced or metastatic disease. Several colostomies, cordotomies and urinary diversions were performed in this group. A number had exploratory laparotomy. Of the 15 patients treated for recurrence with radical surgery, usually exenteration, one is alive at 12 months, two at 24 months and two at 60 months. Three of the eight patients treated with radiotherapy for recurrence are alive at 24, 26 and 60 months, respectively. There were no survivors among the 20 treated with chemotherapy.

Discussion

The survival rates in Stages 1 and 2 do not compare favorably with some of the institutions treating cancer in this country and abroad, although they almost equal the average survival reported in the Annual Report[3] on the Results of Treatment in Carcinoma of the Uterus. Our results may be due in part to biologic variance of clinical material. It may also be due, however, to dispersion of responsibility for cancer therapy among a number of individuals within the participating departments.[4] To eliminate the possible role of the latter factor, a tumor division within the department of obstetrics and gynecology has been organized; its primary responsibility is the therapy of genital malignancy. This group will work as a team with the division of radiotherapy. Long experience teaches that this type of approach leads to improved patient care, a greater understanding of therapy and, at the same time, provides an excellent teaching resource for faculty, resident and student.

Although comparison of cancer results is open to considerable question,[5] the author's personal

Table 3.—Complications and Method of Therapy, 1958-1967, Carcinoma of the Cervix.

	Surgery	Radiation
Proctitis		5
Bowel obstruction		1
Rectal stricture or ulcer		4
Rectovaginal fistula		6
Vesicovaginal fistula	1	5
Bladder ulcer		4
Cystitis		3
Ureteral obstruction	3	5
Ureterovaginal fistula	3	
Vault necrosis		10
Pyometra		1
Pelvic or abdominal abscess	2	
Wound infection	2	
Wound dehiscence	4	
Vascular injury	1	
Pelvic nerve injury	1	
Lympho cyst	3	
Pulmonary embolus		1
Death	1	2
	21	47

Table 4.—Complications Resulting From Therapy, Carcinoma of the Cervix, University of Florida, 1959-1967.

Stage	Type of Treatment	Patient With Complications	Number Treated	Percent
1	Radiation	10	39	25.6%
	Surgery	11	34	32.3%
	Total	21	73	28.7%
2	Radiation	18	74	24.3%
	Surgery	2	4	50.0%
	Total	20	78	25.6%
3	Radiation	8	29	27.5%
	Surgery	0	0	00.0%
	Total	8	29	27.5%
4	Radiation	1	5	20.0%
	Surgery	2	2	100.0%
	Total	3	7	42.8%

experience at another similar institution is a three year survival of 79/94 (84%) in Stage 1 and 33/49 (67%) in Stage 2. The method of treatment, type of patients and follow-up were very similar. The therapy was, however, in the hands of one trained in oncology whose primary responsibility was the treatment of cancer; the team concept was used throughout the years. Perhaps this factor may have contributed to the better survival rate particularly in Stage 2, i.e., 67% versus 46%.

The number of complications is relatively high in this small series, particularly the incidence of urinary and bowel fistulae. Here again it is anticipated that a concentrated experience and team approach will reduce the incidence of complications. Meticulous care of each patient is essential as well as individualization of therapy. As noted previously, radiation or surgery for Stage 1 disease resulted in about the same complication rate. The complications resulting from surgical management are usually immediate and easily recognized; those from radiation therapy may be delayed for years. For example, we have just seen a patient who has a radiation-induced vesicovaginal fistula. Her therapy, at another institution, occurred ten years ago.

Once primary therapy for cervical cancer has failed, the salvage rate is very small. Only eight out of 95 patients referred with recurrent carcinoma are alive, and not all of them for five years. Chemotherapy was completely ineffective for salvage or palliation.

Summary

In summary, the physician who treats the patient with cervical cancer is faced with a life or death situation even though death may be postponed for several years. Responsibility for treatment should be in the hands of the most experienced and capable individuals. They ought to be trained in oncology and have that discipline as their primary mission. Therapy should be given at an institution that is equipped for the complete and continuing care of the cancer patient.

References are available from the author upon request.

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Idiopathic Bell's Palsy In Pregnancy

Alex A. Bezjian, M.D., William N. Spellacy, M.D. and William A. Little, M.D.

The occurrence of idiopathic Bell's palsy during pregnancy is an uncommon complication with only 40 cases reported. The standard obstetric textbooks fail to mention this problem. Our purpose is to present a typical case and review the literature with particular reference to etiology.

Case Report

A 42-year-old primigravida patient was referred to Jackson Memorial Hospital on June 14, 1969 at 39 weeks' gestation because of right-sided facial paralysis of six days' duration. Her last menstrual period began on August 30, 1968. The pregnancy had been uneventful except for mild pretibial edema at 38 weeks' gestation which was successfully treated with diuretics. Six days prior to admission, the patient noticed increasing difficulty in closing her right eyelid. This was followed by inability to hold any water in her mouth. There was no history of associated loss of taste or hearing, diplopia, dizziness or headaches. She also denied any recent upper respiratory infections, exposure to cold air or facial trauma.

On admission, her blood pressure was 130/90 and she weighed 124 pounds. The examination of the face revealed a drooping right corner of the mouth and a wide right palpebral fissure and loss of the creases of the skin on the right side (Fig. 1). The remainder of the neurological examination revealed no abnormalities. The uterine fundal height was 28 cm. and the fetal heart rate was 140 per minute. There was a trace of pretibial edema. The laboratory studies revealed a normal complete blood count, urine analysis, and Papanicolaou smear, and her blood type was B-Cde with no antibodies demonstrable. The placental function tests were normal.

The patient was placed at bed rest and given a 400 mg. sodium diet. The edema subsided. She also received an eye patch and ophthalmic ointment. Because of an unfavorable cervix, the patient was discharged home to continue the same treatment and to resume diuretics.

Eleven days later, she returned in active labor. There was mild pretibial edema. The Bell's palsy had disappeared. After a total labor of 22 hours and 40 minutes she delivered a viable 3033 Gm. male infant over a midline episiotomy using general anesthesia and the assistance of low forceps. The Apgar score was 8 at five minutes. The infant's blood type was O Rh positive and the patient received RhoGam.* The postpartum course was uneventful and she was discharged on the third day.

Bell's palsy or peripheral facial nerve paralysis is usually of "idiopathic" etiology although it may be due to such diseases as myxedema, diabetes mellitus, sarcoidosis, neoplasm, trauma, vascular accidents, or demyelinating diseases.[1] The idiopathic variety has been attributed to vitamin deficiencies or cold exposure, but a recent study of 499 consecutive cases showed epidemics of occurrence which suggest a viral etiology.[2]

The clinical course is usually one of acute onset of unilateral facial paralysis often accompanied by pain behind the angle of the mandible and/or ear with a low grade fever. With paralysis of the facial muscles, the eye is vulnerable to injury. Attempts to close the affected eyelid will result in movement of the eyeball upward and outward (Bell's phenomenon).[3]

The prognosis is good with recovery usually beginning within 10-14 days. Spontaneous recovery can be expected in 75% to 90% of patients.[3] Recently, Taverner described a "anodal galvanic threshold of the tongue" test which can predict complete recovery with 95% accuracy.[4]

The treatment has been divided into two phases: symptomatic and prevention of denervation. The symptomatic treatment includes systemic analgesics, sedation, heat to the painful area, electrical muscle stimulation, and protection of the eyeball with patch and eye washes or ointments.[5] Prevention of denervation can be accomplished two ways. Taverner and co-workers treated 400 cases with corticosteroids using ACTH injections and claimed a reduction of residual dener-

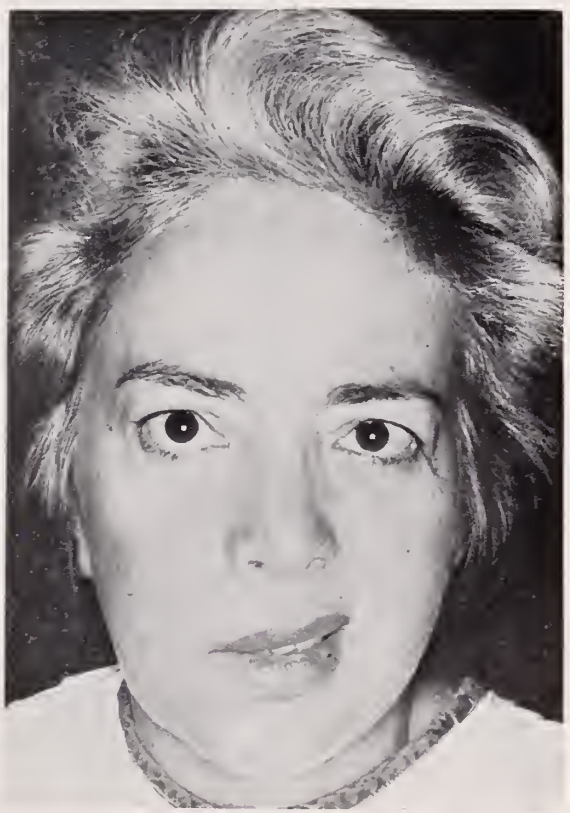


Fig. 1.—Patient with right-sided Bell's palsy in the third trimester of pregnancy.

From the Department of Obstetrics and Gynecology, University of Miami School of Medicine, Miami.

*RhoGam is human immune globulin to Rho(D) supplied by the Ortho Pharmaceutical Corporation of Raritan, New Jersey.

Table 1.—A Review of Reported Cases of Bell's Palsy Complicating Pregnancy

Author and Year	Number Cases	Age	Parity	Blood Pressure	Time in Pregnancy	Side Affected	Course
Faris, 1955[9]	3	-	0	-	-	Left	-
Föllmer, 1957[10]	3	35-39	3-7	1 hypertensive	Term	-	Cleared postpartum
Barnes, 1962[11]	1	29	-	-	Term	Left	Cleared postpartum
Pietsch, 1964[12]	3	20-31	0-3	3 toxemia	32-39 wk.	2 left 1 right	Medical
Reimann, 1965[13]	1	29	3	Edema	39 wk.	Left	Medical
Pereira et al., 1965[14]	4	19-37	-	3 hypertensive	Late	-	-
Edwards, 1965[15]	9	17-38	0-10	2 hypertensive	36-40 wk. (7) 6-14 day pp (2)	5 left 4 right	Steroids helped 4 Recovery 5/7
Smith & Newton, 1967[16]	7	15-20	0-4	2 hypertensive	35-40 wk.	6 left 1 right	Medical
Hanson & Teteris, 1969[17]	2	19-22	0-1	2 toxemia	36 and 40 wk.	2 left	Cleared postpartum Steroids to one
Pope & Kenan, 1969[18]	7	19-36	0-10	1 toxemia	16-39 wk.	3 left 4 right	4 surgical decompression
Bezjian et al., 1970	1	42	0	Toxemia	39	Right	Medical

vation from 40% to 13% with this therapy.[6] Kettel popularized surgical nerve decompression and Jongkees has continued to advocate this approach.[7,8]

The reports of this complication with pregnancy over the past 15 years are listed in Table 1.[9-18] Smith and Newton state that the complication does not affect nor is it affected by pregnancy.[16] In a review of 422 cases of Bell's palsy, 207 occurred in women and only five of them were pregnant.[18] Pope and Kenan concluded that this disease was not increased during pregnancy. This may not be correct. Few cases have been reported; however, most of these occurred in the last trimester of pregnancy. Of 41 cases reported, there have been 15 (36.5%) with associated toxemia.[10,12,14-18] These findings would suggest a "pregnancy etiology" of tissue edema late in gestation with compression and paralysis of some facial nerves if the bone foramen were small. Although no reports are available, it would be expected that other potential fluid retention state in these women, as in future pregnancies or while taking oral contraceptives, might cause a recurrence of the problem. Although the left side was affected more often than the right, the difference is not significant ($p > 0.05$).

The treatment during pregnancy should not differ from that used when no pregnancy exists. Specific causes should be excluded. The symptomatic therapies should be given. Since water retention may be an etiologic factor in some of these patients, low sodium intake and diuretics would seem indicated as well as delivery when obstetrically feasible. Several patients have been treated with corticosteroids with apparently good results.[15,17] Some investigators have noted fetal problems in mothers receiving corticosteroids; however, not everyone agrees.[19-20] There is no contraindication to this form of therapy when indicated during pregnancy, particularly in the last trimester. When paralysis does not begin to reverse soon after medical treatment has been started, the Taverner tongue test should be tried and if denervation is predictable, surgical decompression should be considered. This has been successfully performed by Pope and Kenan.[18]

Summary

The forty-first case of Bell's palsy complicating pregnancy is presented and the literature reviewed. Since most cases occur in late pregnancy with toxemia often associated, a pregnancy related tissue edema etiology appears probable. Treatment includes symptomatic pain relief, eyeball protection, sodium restriction and diuretics. When testing indicates that nerve degeneration is occurring, either corticosteroid or surgical nerve decompression may be necessary. The prognosis for recovery is excellent.

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editorial comment

Jacob Green, M.D.

"Idiopathic Bell's Palsy in Pregnancy," by Drs. Bezjian, Spellacy and Little is well prepared. Its weakest point, perhaps, is the fact that only one case is cited. I am certain, however, that reporting this phenomenon even in the single patient adds to the literature. In the past year, I have seen three patients with the condition.

The paper maintains that most patients with Bell's palsy improve in ten to 14 days. Relative experience and the literature suggests that the time of recovery is longer.

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An Unusual Application of State Inspection

Mario Presman, M.D. and Bernard Lieberman, M.D.

This report comprises a case and brief review of the literature apropos the ingestion of foreign bodies.

All of us daily go through the normal process of swallowing, rejecting that which is unfit in the oral cavity. Only the very young[1] or senile cannot or will not make this distinction.

Numerous reports appear in medical journals of objects passing the oral cavity in patients wearing total palatal dentures. Usually these are bones or objects having a smooth surface. The report which follows is unusual in the object ingested and the sequelae.

Report of Case

The patient, a well-oriented and active 70-year-old veteran, entered the hospital with a history of burning-like pain in the epigastric region of three months' duration and five episodes of melena in the preceding two days. There had been no loss in weight and food only partially relieved the pain. He had no symptoms or signs referable to other organs nor any previous gastrointestinal disease. On May 12, 1966 results of esophagoscopy and barium enema were described as normal. A radiograph of the abdomen showed 2.5 cm. opaque object lying to the right of the spine. Upper gastrointestinal study revealed it to be in the duodenum. Even with careful questioning, the patient could not recall ingesting a foreign object.

On May 23, 1966 a duodenostomy[2] was performed and the offending item removed. The pathologist reported that it was a metal folding tag measuring 2.5 cm. worded "Inspected U. S. Department of Agriculture—Georgia Dressed."

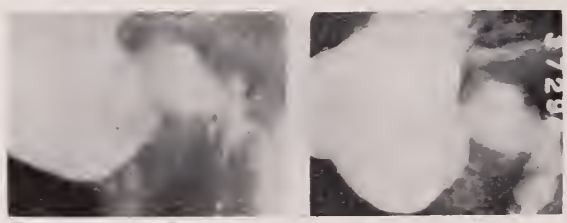


Fig. 1.—Note the folded tag in the duodenum almost obscuring the barium in the bulb.

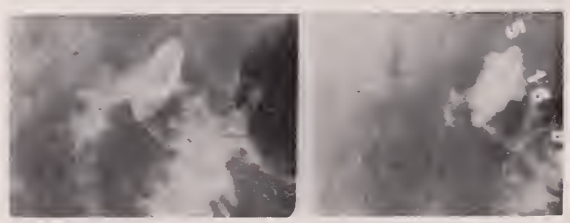


Fig. 2.—Attempt at air study to show outline of duodenal bulb holding the tag.

From the radiology service of the Veterans Administration Hospital, Miami.

After surgery, the patient recalled a chicken dinner which his wife had prepared at about the onset of the illness but could not recall a foreign body.



Fig. 3.—Mucosagram of the stomach with metal tag clearly demonstrated in the duodenum.

Discussion

No similar case of an object lodged in the duodenum causing the signs and symptoms of acute ulcer has appeared in the literature. Surgically no ulcer was found, and a complete remission of signs and symptoms occurred with removal of the object.

In order to verify the postoperative status of the patient,[1] radiography of the area of previous involvement should be performed. In our patient a follow-up gastrointestinal series revealed only slight postsurgical deformity of the duodenal bulb.

Summary

A case is presented of an unusual response to ingestion of a foreign body.

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Prevalence of Susceptibility to Rubella Virus in a Northern Florida County

Richard J. Hildebrandt, M.D. and Gilles R. G. Monif, M.D.

Susceptibility to rubella virus varies between 10% and 40% among pregnant women.[1-5] Studies indicate there may have been a change after the epidemic of 1964-1965, the last one to occur in the United States.[6] We investigated the prevalence of susceptibility in a socioeconomically and racially diversified population of a northern Florida county. This is a report of our findings.

Materials and Methods

Patients initially examined in the prenatal clinic of J. Hillis Miller Health Center in Gainesville comprised the study population. This permitted the inclusion of white patients of private physicians, which were principally wives of physicians and graduate and medical students. By definition, clinic patients were those with per capita income of less than $3,000 per year.

At the first visit sera were obtained for the legally required test for syphilis and subsequently utilized in serologic screening for prevalence of antibody to rubella virus. Collections took place from January 7, 1968 to January 7, 1969. Upon completion of serologic testing, we reviewed the patient's charts to assure that the pregnancy of those included in the study had been confirmed in the clinic.

We utilized the hemagglutination-inhibition (HAI) test developed by Stewart et al and modified by Sever et al.[7,8] Briefly, serum was mixed with an equal volume of Dextrose Gelatin-Veronal buffer (DGV-0.2 ml. and 0.2 ml.), 0.6 ml. of 25% acid washed kaolin in DGV was added and the mixture shaken vigorously, then incubated for 20 minutes at room temperature. The kaolin was sedimented by centrifugation at 4 C for 20 minutes at 1000 g. To the supernatant volume was added 0.05 ml. of 50% suspension of 24 hour old chick cells in DGV obtained from unfed chicks less than 24 hours old. After shaking, the mixture was refrigerated at 4 C overnight; the suspension was centrifuged at 4 C for 20 minutes at 1000 g. The supernatant was removed and inactivated at 56 C for 30 minutes. The serum treated in this way is considered as a 1:4 dilution of the original.

For the HAI test, serial dilutions of treated serum were made with 0.025 microdiluters in DGV diluent. Four units (determined by HA titration) of rubella HA antigen* were added (0.025 ml.). This mixture was incubated at room temperature for one hour. A suspension of chick blood cells (0.16% in DGV) was added in a volume of .025 ml. and the test was incubated at 4 C overnight. The antibody titer is reported as the reciprocal of the highest dilution causing inhibition of agglutination. A threshold dilution of 1:16 was the minimum titer deemed indicative of the presence of antibody.

Results

A total of 475 sera were tested for the presence of hemagglutination-inhibition antibodies to rubella virus. The overall incidence was 18.1%. Sera then were divided according to private white and Negro patients, and clinic white and Negro patients. Data from these subgroups are presented in Table 1 and Figure 1.

The Negro clinic patients differed from their white counterparts in terms of absence of antibodies to rubella virus ($P < 0.01$). This finding would have been accentuated further by correcting the difference in mean ages between the perspective subgroups (Table 1). The white private and clinic populations did not differ statistically from one another. The number of Negro private

*Obtained from Flow Laboratories.

From the section of infectious disease, Department of Obstetrics and Gynecology, University of Florida College of Medicine, Gainesville.

This work was supported in part by grants from the Lalor Foundation, the University of Florida institutional grant from the American Cancer Society, and U.S.P.H.S. grant number 02289-01.

Table 1.—The Prevalence of Susceptibility to Rubella Virus Infection.

Population	Number Patients	Median Age	% of Patients Without Antibody	Statistical Analysis
Negro clinic	210	21	(24/210) 11.4%	
Negro private	21	22	(5/21) 23.8%	
White clinic	142	23	(35/142) 24.6%	
White private	102	25.5	(22/102) 21.5%	P<0.01*
			(86/475) 18.1%	P<0.01*

* Analyzed against the Negro clinic population

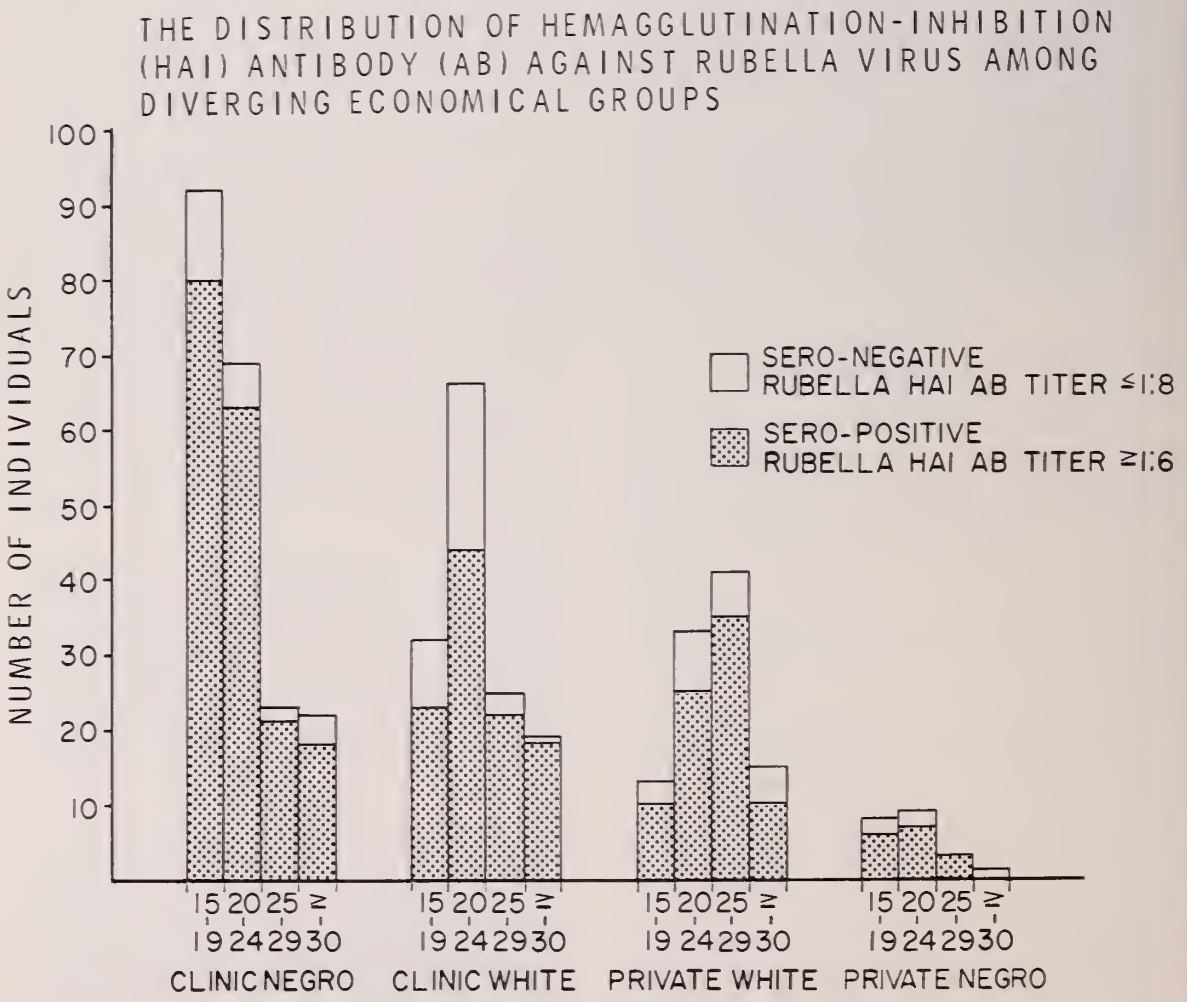


Figure 1

patients was too small for analysis; nevertheless, this population more closely resembled the two white populations.

Discussion

Major epidemics of rubella occur characteristically in seven to eight year cycles. Serologic studies prior to that of 1964-1965 revealed an overall population at risk of 17.5%.[6] Comparable populations resampled in 1966 following the epidemic showed the frequency of susceptibility to be 7.8% or approximately one-half.[6] These figures reflected the prevalence of susceptibility in an urban population.

In the Gainesville/Alachua County population, sampled three years after the last major epidemic, an 18.1% overall incidence of susceptibility was observed. The significantly greater overall susceptibility of white private and clinic patients over Negro patients inferred a higher attack rate ($P < 0.01$) for Negroes during the preceding epidemic. This finding is comparable to that previously reported in urban populations and suggests that socioeconomic status may be a major factor determining susceptibility.

Summary

In this study of prevalence of susceptibility to rubella virus in a northern Florida county, an overall incidence of 18.1% was observed in 475 pregnant women. Frequency of susceptibility for the Negro clinic group was 11.4% as opposed to 24.6% in the white clinic group and 21.5% in the white private group. The number of Negro private patients was too small for any significant analysis.

We acknowledge the technical assistance of Jean M. Weber with sincere appreciation.

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editorial comment

E. Charlton Prather, M.D.

Hildebrandt and Monif's paper, "The Prevalence of Susceptibility to Rubella Virus in a Northern Florida County," is sobering—one in five pregnant patients susceptible to rubella and one in four contracting the disease during the first trimester yields a malformed infant! The potentials are staggering, given another rubella epidemic equaling that of 1964-1965.

The recently licensed rubella vaccine is calculated to head off such unthinkable potentials. But the vaccine is not recommended for the population at prime risk—the postpubertal female—because of uncertainties as to its safety in pregnancy. Additionally its side effects in the adult female discourage wide acceptance. These facts have prompted a "first" in the history of immunization practice—the immunization of those *NOT* the primary target—the active immunization of one group for the protection of an entirely different group.

Since susceptible pregnant females usually acquire the rubella infection through contact with youngsters, public health authorities urge immediate immunization of those in kindergarten and first through third grades, asserting this would provide maximum preventative impact. It is well known that these age groups account for the greatest number of infections. The highest transmission rates occur among these children, for it is the classroom that brings them together for the first time. The theory is that immunization of an

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adequate number retards viral transmission and decreases or eliminates risks for susceptible adult females.

Epidemiologically, the theory is sound. Its premises—immunization of groups and (in) adequate numbers—merit emphasis. The common usage of the word "group" implies a cohort by age, socioeconomic status or some other broad-based denominator. In the context of rubella control, the definition is more restrictive and limiting —Mrs. Jones' first grade or Mrs. Brown's kindergarten—children physically grouped as to provide opportunity for transmission of infection. An estimated 85%-90% of the members of such groups must be immunized by vaccine or naturally immune through previous infection to effectively prevent rubella from developing within the group. The checkerboard pattern of solid immunity thus provided will afford a strong bulwark against epidemic build-up.

The community-wide techniques as employed with polio and measles—the "on Sunday afternoon" campaigns—are not applicable; however, they would be effective if 85%-90% coverage could be assured for each epidemiologically important cluster of susceptible children. Experience has not shown that the immunity coverage was uniformly distributed by such campaigns.

The current rubella situation is paradoxical. Protection of the pregnant patient from the infection depends solely upon community action. In all other areas of personal health, individual action is decisive.

▶ Dr. Prather, P.O. Box 210, Jacksonville 32201.

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We wish to thank Drs. Marcia K. Bilbao, Louis H. Frische, Josef Rösch and Charles T. Dotter for this exceptionally graphic example of hypotonic duodenography.

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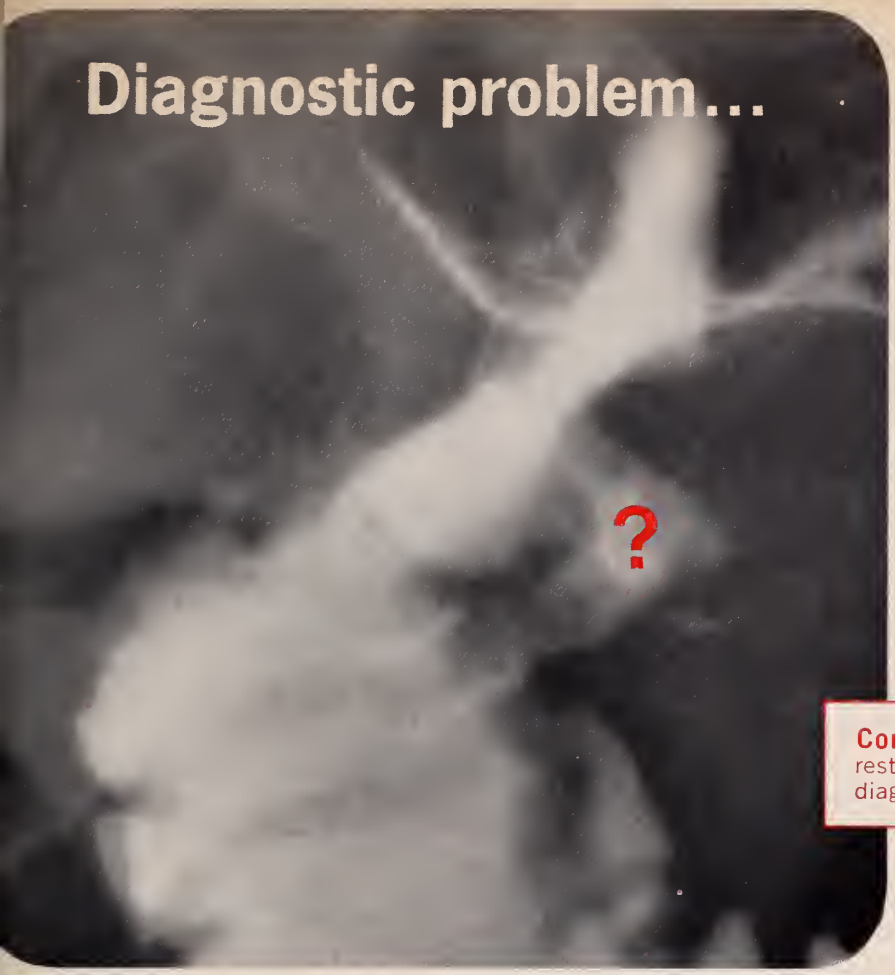
Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal dosage tolerated without excessive side effects is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two 15-mg. tablets four to six times daily may be required. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

982

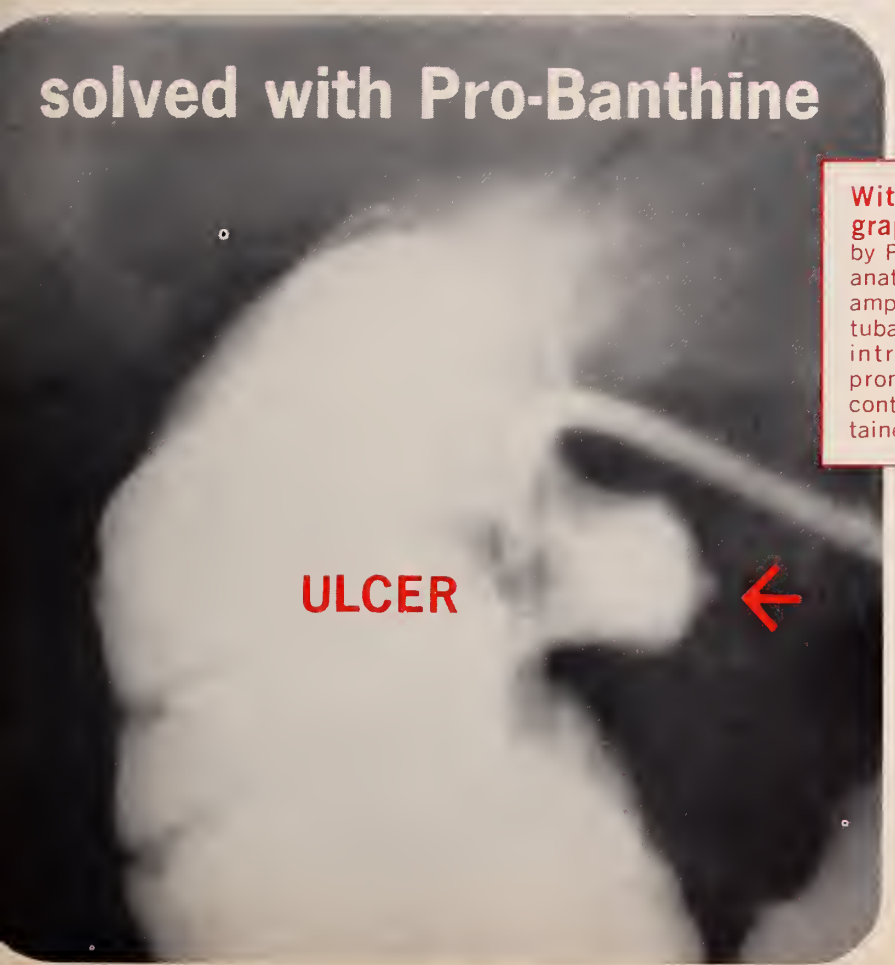
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UP TO 12 HOURS CLEAR BREATHING ON ONE TABLET

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Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

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Florida Medical meetings

FMA Approved Postgraduate Meetings

APRIL

16-18 Pulse of Laboratory Medicine, Tides Hotel and Bath Club, Redington Beach (St. Petersburg). For information: M. A. Barton, M.D., 701 - 6th St., S., St. Petersburg 33701.

17-18 Pediatric Electrocardiography Seminar, J. Hillis Miller Health Center, University of Florida. For information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

25 Fourth Annual Seminar on Diagnosis and Management of Cancer, Port-O-Call Resort Inn, Tierra Verde, St. Petersburg. For information: John Carbonneau, 2909 Bay-to-Bay Boulevard, Tampa 33609.

MAY

13-16 Greater Miami Pediatric Society Seminar, Jackson Memorial Hospital, Miami. For information: Retha Schiess, M.D., 7001 Galloway Rd., Miami 33143.

14-16 Current Cancer Concepts, Mount Sinai Hospital Auditorium, Miami Beach. For information: Public Relations Office, Mount Sinai Hospital, 4300 Alton Rd., Miami Beach 33140.

DECEMBER

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings in Florida

MAY

1- 5 Association for Research in Ophthalmology, Sheraton Sandcastle, Sarasota. Sec.: Herbert E. Kaufman, M.D., University of Florida College of Medicine, Gainesville 32601.

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn, M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F. Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

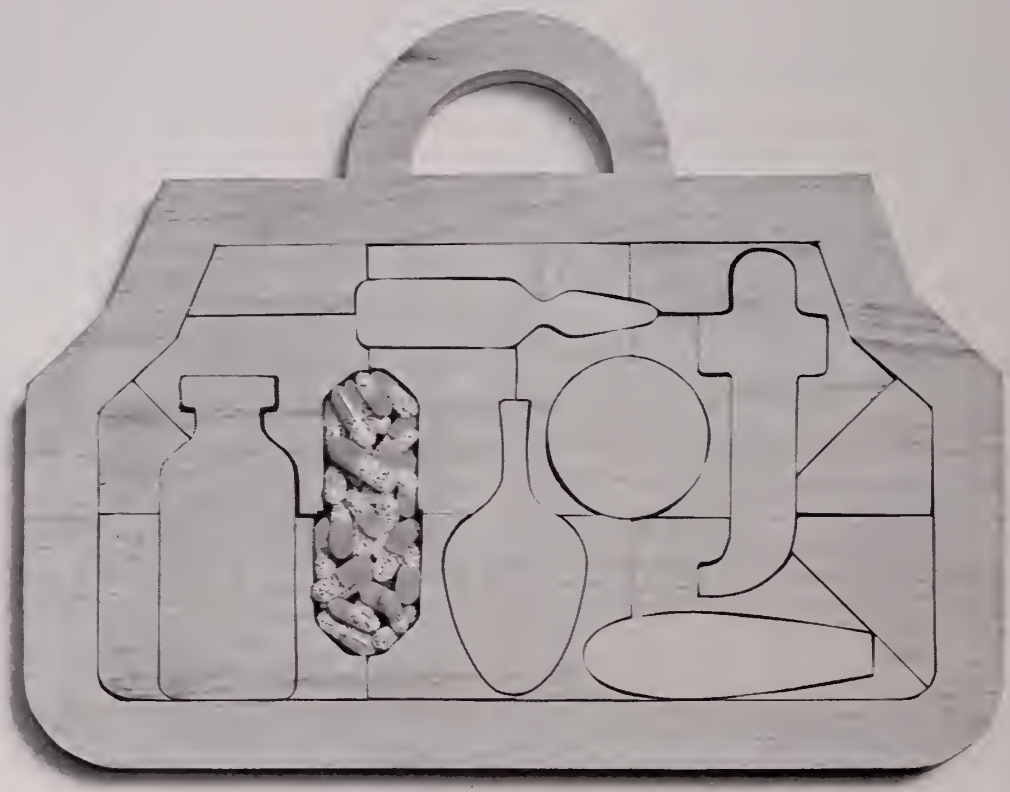
3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.



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Woman's Auxiliary Call to Convention

Members of the Board of Directors look forward to seeing you at the 43rd Annual Meeting of the Woman's Auxiliary to the Florida Medical Association at the Diplomat Hotel in Hollywood May 6-10. The schedule is changed somewhat from former years and should work out to better advantage for all of us. The Pre-convention Board Meeting will be on Wednesday afternoon; both sessions of the House of Delegates will be on Thursday, and the Post-convention Board Meeting on Friday morning. This will give us more time to play.

We have tried to streamline some of the routine activities this year to make it more interesting and give us time for special features—and we do have a few of those which we think you will like. Our newest is the Auxiliary booth in the Exhibit Hall. We will need to have members in the booth during all hours the hall is open. This will be a fun thing and a wonderful place to see old friends and make new ones. Do sign up for an hour or two. A schedule sheet will be provided at the registration desk.

The Fourth Annual Art Show will have two new features. A category has been added for sons and daughters of Florida physicians, and all entries in the show will be considered for the new and special "Editor's Award." The winning entry will be used on the cover of the JOURNAL of the Florida Medical Association.

At the first session of the House of Delegates, Mr. Nelson Young, P.M., Florida, will tell us about things we need to know for our future security.

Our special guest from the National Auxiliary will be Mrs. G. Prentiss Lee (Patty), First Vice President. She is one of the most charming and attractive women you will ever meet and, besides that, she is smart and efficient as well as informed. To know her is to love her, and you will want a chance to know her.



Mrs. Gilliland

The basic program is presented here. Remember that *all* Auxiliary members are welcome to attend *all* sessions. It is a good place to learn more about the Auxiliary, what it does and what it stands for. Members-at-large are particularly urged to attend; however, only members of the House of Delegates may vote, even though any member may address the group.

We look forward to seeing you at the Diplomat in May!

MARION S. GILLILAND (Mrs. C. H.)
PRESIDENT
WOMAN'S AUXILIARY TO THE
FLORIDA MEDICAL ASSOCIATION

Woman's Auxiliary to The Florida Medical Association, Inc.
Forty-second Annual Meeting – May 6-10, 1970
Diplomat Hotel, Hollywood, Florida

DAILY SCHEDULE

WEDNESDAY, MAY 6

10 a.m.-5 p.m.	Registration for all State Officers, Chairmen and County Presidents, Mezzanine Lounge. Pre-registration for Delegates to the House of Delegates Annual Meeting, Mezzanine Lounge. Registration for members helping to man booth in Exhibit Hall, Mezzanine Lounge. Pre-registration for awards and FLAMPAC luncheons.
12 noon	Executive Committee—Suite of President and President-Elect.
2 p.m.	Pre-convention Board of Directors meeting, Mezzanine Theater.

THURSDAY, MAY 7

8 a.m.-4 p.m.	Registration for all Officers, Chairmen, County Presidents and Delegates to House of Delegates, Mezzanine Lounge.
8 a.m.-9 a.m.	Complimentary Continental breakfast, Mezzanine Lounge.
9 a.m.	First Session of House of Delegates, Mezzanine Theater.
12:15 p.m.	Awards luncheon, Les Ambassadeurs. All awards will be presented including AMA-ERF Art Show, Doctor's Day, Research and Romance. Address by Mrs. G. Prentiss Lee, National First Vice President.
2:30 p.m.	Second Session of House of Delegates, Mezzanine Theater.

FRIDAY, MAY 8

9 a.m.	Post-convention Board of Directors meeting and orientation for all State Officers, Chairmen, County Officers and Chairmen. Orientation will be conduced by Mrs. Lee, Mezzanine Theater.
12:15 p.m.	FLAMPAC luncheon, Les Ambassadeurs. Speaker will be Senator Robert Packwood (R) Oregon.

Auxiliary Hospitality Room, Mezzanine Room 233



Sen. Robert W. Packwood (R), of Oregon, shown here with President Richard M. Nixon, will be speaker at the Woman's Auxiliary-FLAMPAC luncheon May 8 during the FMA annual meeting. In 1968 he defeated the four-term veteran Wayne Morse to become the youngest member of the U.S. Senate. Sen. Packwood is compared by many Republicans to the late President Kennedy in personal magnetism.

Fourth Annual Benefit Art Show

Exhibit Rules and Regulations

1. All entries must be original work.
2. Pictures must be framed and wired for hanging. (Stands will be provided for sculpture, etc.)
3. Each entry must have a typed card indicating Name, Address, Medium, *Dimensions* and Title. Please list price if entry is for sale; otherwise, mark not for sale (NFS).
4. No more than two entries may be entered per person for each category.
5. Only one artist's name should be listed for each registration slip.
6. A registration fee of $10.00 will be charged for each two (2) entries. The same fee of $10.00 (minimum) applies to a single entry.
7. All registration slips and checks must be sent in *together* no later than April 30, 1970. *No entries will be accepted otherwise.*
8. All pre-registered entries are to be delivered by hand to the Gallery of the Convention Hall at the Diplomat Hotel no later than Wednesday, May 6. *Shipped entries will be refused.*
9. All entries must remain on exhibition until 3:30 p.m. on Saturday, May 9.
10. All entries must be picked up at the Gallery of the Convention Hall of the Diplomat Hotel no later than 4:30 p.m. Saturday, May 9.
11. Doctors, their wives and children are eligible to enter. Prizes will be donations to the American Medical Association Education and Research Foundation in the name of the winners.

Kindly enter my registration to show in the Benefit Art Show.

Fee of $_____ for _____ entries is enclosed.
I agree to abide by the rules and regulations for exhibiting material in the show.

Name _____

Address _____

City _____ County _____

I will be showing in the following categories: Please check [✓] appropriate category (categories) applying to your entry (entries).

☐ A Painting, Traditional (Representational)

☐ B Painting Abstract (Nonrepresentational)
Painting categories (A & B) include any media in color: will include acrilics, oils, casein, collage, water color, pastels, etc.

☐ C Crafts (will include sculpture, pottery, ceramics, mosaic, weaving, jewelry, etc.)

☐ D Graphics (will include pen and ink, charcoal, photography, etc.)

☐ I am the son/daughter of a Florida physician.

A registration fee of $10.00 will be charged for each two (2) entries. Make checks payable to: Mrs. J. R. Hege, 1050 Jefferson St., Hollywood, Fla. 33020

Registration Deadline April 30, 1970

Dialogue

Spontaneous comment by readers is invited. Choice of subject and manner of treatment is an individual matter for each contribution. The ideas, opinions or statements are those of the individual who is writing and are not meant to reflect the attitude of the Florida Medical Association, its officers or its publication. Each one is invited to express himself on a subject close to him. Acceptance of material will be based on space, appropriateness and good taste according to our best judgment.—Ed.

A Few Comments on the Rising Costs of Medical Care

Warren W. Quillian, M.D.

Dr. Warren W. Quillian is a distinguished pediatrician, a past president of the Florida Medical Association and president and chairman of the Board of Blue Shield of Florida.—Ed.

During the past year the medical profession has been criticized—sometimes fairly, sometimes unjustifiably—regarding the physicians' role in the spiraling expense to recipients of medical care: our patients. Everyone is aware of the trend. Through the medium of newspapers and by unsupported statements, charges and accusations have been widely publicized not predicated upon actual facts. This is especially true with reference to medical practices related to the Medicare program. Instead of responding formally, which would have been premature at that time, the Florida Medical Association aided by Blue Shield of Florida began assembling definite facts.

Significant information has been obtained which should provide an accurate picture.

The Social Security Administration's Office of Research and Statistics recently released figures indicating that the overall increase in health care costs amounted to 22.2% during the first three years of the Medicare program. In the same period, hospital daily service charges rose 54.6% and physician fees increased 21.5%. At the end of the three years, medical care services were up 27.1%.

The Medicare program covers 740,000 Florida senior citizens; this increases to approximately 1 million during the winter months. From January 1 through November 23, 1969, a total of 1,301,615 claims involving $96,080,214.77 were filed with Blue Shield as carrier for Part B of the Medicare program, which refers to physicians' services. Processing of claims has been a formidable task, but bear in mind the number of patients and physicians involved. A single service to an individual patient is not represented; the physician provides many services.

Despite the volume, less than 3% of the licensed doctors of medicine practicing in Florida have been questioned or their fees reviewed. Conversely, more than 97% treating Medicare patients realized their responsibilities and maintained the traditional high standards which the medical profession demands of itself.

People are demanding and getting better quality health care and supervision than ever before. Let's consider our situation as physicians. The responsibilities are multiple and consist of more than diagnosis and treatment of disease. We are aware of the mounting cost and are concerned about it; however, our primary effort must be provision of professional services of the highest quality. Medical judgment is important in helping to conserve the patient's dollar. Each day we decide whether hospitalization is needed, how much laboratory procedure is indicated, and whether x-ray studies and other ancillary services are necessary. Is special nursing care essential? What specific drug therapy is indicated?

To avoid practices which might not be necessary, the judgment of fellow practitioners may be sought when costs appear excessive or improper utilization is possible. Accordingly each county medical society has a Peer Review Committee composed of local physicians who determine claims referred to them fairly and objectively. In addition a close cooperation exists between local and state medical organizations through regular utiliza-

tion review. Questionable claims referred to Blue Shield are considered by the State Claims Committee. It is composed of physicians from the entire state who meet each week to attempt to achieve an equitable settlement of claims requiring medical evaluation. A Utilization Review Committee works with this Committee in instances where utilization of benefits is in question. If necessary, claims may be forwarded to the local Peer Review Committee for study and final decision.

The problems incident to rising health care costs cannot be ignored. We urge that questions of the patient concerning fees or professional services be discussed with his personal physician. Many can be answered satisfactorily, but the county medical societies and the Florida Medical Association are anxious to help when needed. Mutual trust and confidence are necessary to obtain successful results. Let's work together toward better understanding and the promotion of better health at less expense.

Blue Shield of Florida is attempting to serve its purpose equitably. It functions in accordance with definite guidelines established by a dedicated board of directors comprised largely of physicians who are honored members of the Florida Medical Association. As chairman of the board, I earnestly request your understanding and help toward the proper solution of our problems.

▶ Dr. Quillian, 140 Alhambra Circle, Coral Gables 33134.

Individual or Third Party Responsibility

William T. Mixson, M.D.

Recently the participating physicians of Blue Shield were told of a new type of coverage, a plan that will pay full benefits at the "usual and customary" rate and no service benefit limit on family income. The members of Florida Blue Shield were given the option of participating or not in this plan, but with the stipulation that Blue Shield must be notified that you did not want to participate or your participation was automatic. Since this notice was a form letter similar to so many we receive, most physicians discarded it and did not realize to what they had agreed. Unless you wrote to Blue Shield stating that you did *not* wish to participate, you are automatically participating.

This plan is being offered by Blue Shield, largely on the demand of certain unions, for insurance that will pay the entire fee of physicians for medical care and services. It is said that there will be very little demand for this type of coverage because of the high cost, but already it has been offered to members of FMA for their personal coverage.

I have elected not to participate and urge my colleagues to give this concept serious consideration.

The basic reason for opposition is that the plan makes a third party entirely responsible for payment of fees. I believe in retaining individual responsibility for fees and believe this is inherent in a successful private practice type of health care service.

The attitude of the patient toward the illness and toward his doctors, and the attitude of the doctor toward the patient and his illness, are extremely important factors in the final result. This relates to the art of medicine. It is intimately tied up with the patient's individual responsibility toward the doctor's fee. This may seem crass and lacking in idealism, but it reflects a very basic characteristic of human nature. It is one reason that the capitalistic system has worked so well and we should stop apologizing to the socialists because of it.

With the advent of the third party becoming completely responsible for the medical fee, whether government or insurance, the attitude of the patients will change and will ultimately destroy the patient-physician relationship which at present contributes so much to their treatment. All physicians have dealt with patients in a medical environment where the patient had no responsibility for payment of fees, such as in charity and veterans hospitals and with military career personnel.

(Continued on page 41)



"All Interns are Alike"

t stands to reason. They all go through the same train-ng; they all have to pass the same tests; they all have o measure up to the same standards; they all are nderpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin ablets must be alike.

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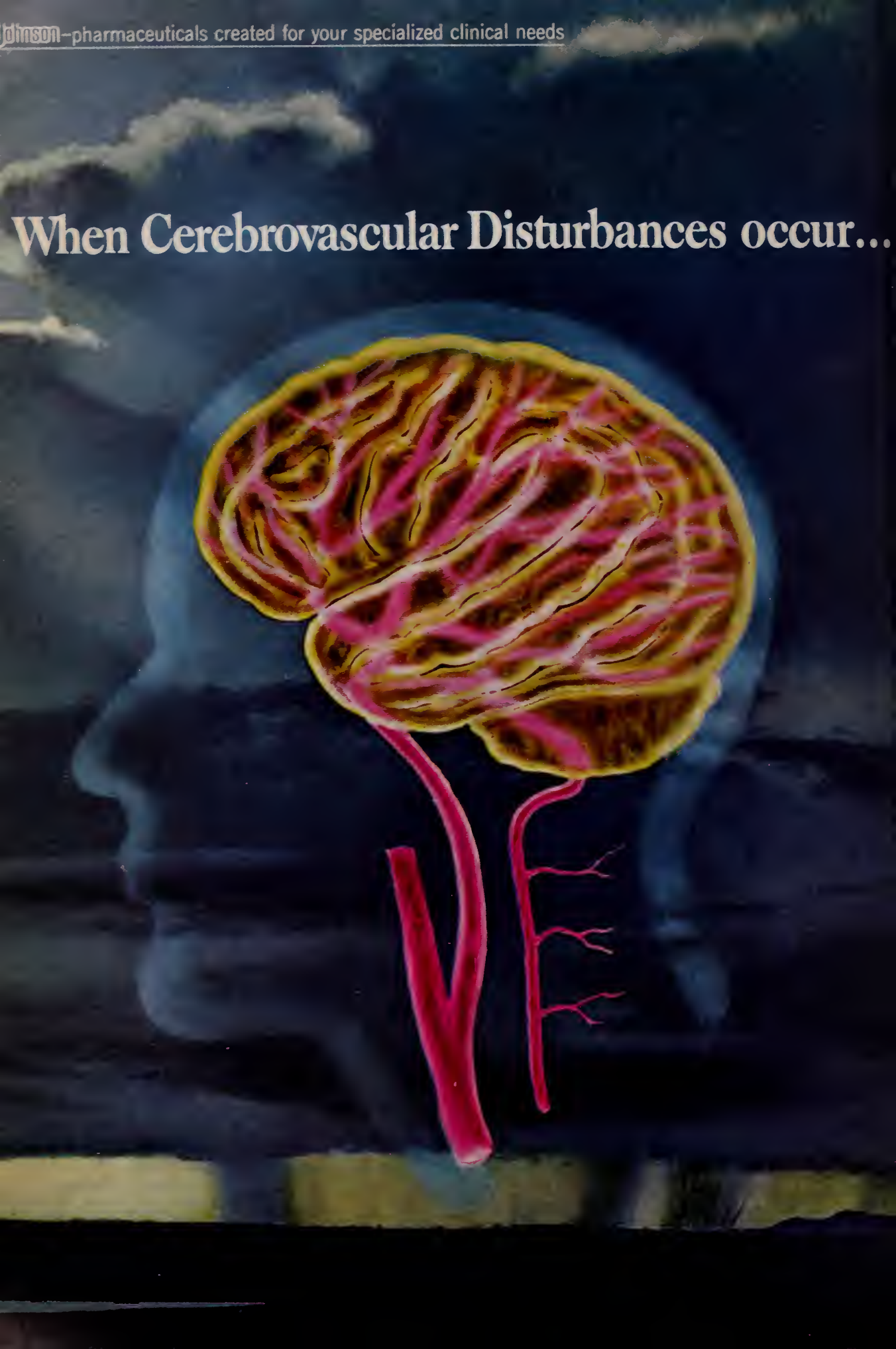
You might also say that all interns aren't alike, either.





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ough not all clinicians agree on the value of vasodilators in vascular disease,[1] several investigators[2-5] have reported favorably on the effects of suprine on cerebral blood flow. Effects have been demonstrated both by objective measurement[2,5] and observation of clinical improvement.[2-4]

cations: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), naud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **mposition:** VASODILAN tablets, isoxsuprine hydrochloride 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial eding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. As intramuscular administration of 10 or more may cause brief hypotension and tachycardia, single intramuscular doses exceeding this amount are not ommended. Complete details available in product brochure from Mead Johnson Laboratories. **References:** (1) Fazekas, .; Alman, R. W.; Ticktin, H. E.; Ehrmantraut, W. R., and Savarese, C. J.: Angiology *15*:No. 2 (Feb.) 1964. (2) Horton, ., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (3) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 ne) 1960. (4) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. (5) Whittier, J. R.: Angiology 2-87 (Feb.) 1964.

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They are getting something for nothing and reflect this fact. They feel they deserve the medical service and the doctor better provide it. There is a demand for unnecessary services: visits, laboratory tests, hospitalization, and prolongation of hospital stay. The change in attitude may be gradual in private practice because of long-established physician-patient relationships, but it will be inevitable. When the patient has to pay a portion of the fee and is personally responsible for the total fee (although insurance may pay most), it helps to protect the physician-patient relationship as presently conceived.

The cost of a full coverage plan can only be high and go higher. The patients, through their groups, will fight with the insurance companies and Blue Shield but the doctors will be blamed for the high cost. Eventually the program will become so expensive that the groups will turn to government. In the meantime, we will have helped create a fertile bed for government control because the patient and doctor both will have come to expect third party responsibility for payment. It is then easier to shift to government, and the only difference at that point will be the controls which governmental regulation will assure.

Initially, the numbers of people covered will be small, but the plan will soon spread to cover federal, state, and county employees and most other organized groups. Then there will be a clamor by individuals who do not qualify for groups also to receive "something for nothing." This reinforces the necessity for government to step into the picture.

The attitude of our Blue Shield leadership is understandable. They see Blue Shield as a business that must compete to survive. But Blue Shield has a unique advantage over private insurance companies—the participating physician. Without the participating physician, the ability of Blue Shield to sell various plans would be seriously curtailed. Physicians of this state should not participate in such a plan as full coverage for all income levels, no matter what the fee schedule, because it will undermine our present concept of the best way to deliver medical services. Let the private insurance companies have this business but without the help of participating physicians. The high cost involved will eventually prove the plan to be unprofitable and it will be abandoned, hopefully before a large segment of the population gets used to full payment by a third party.

It must be admitted that there are many advantages in a full coverage plan. The patient knows he will receive medical care without any worry about ability to pay. He will retain freedom of choice of his physician. The physician will be paid promptly and at a fee level that most will consider fair, at least in the early experience of the plan. (Later there will be more discontent with fee levels as times change with inflation and fees fail to keep pace.) There is a distinct advantage of a 100% collection ratio. As the plan becomes more universal there would be less need to scale fees down for the lower income patient because they would be covered at the usual and customary level. This would far outweigh the disadvantage of being unable to scale upward the fee for the occasional patient who is a high-income executive. Most physicians see far more of the low-income patients.

These advantages do not compensate for the loss of individual responsibility on the part of the patient. I urge the physicians of Florida to write Blue Shield and state that you will *not* participate in this new plan. Urge the Board of Governors of FMA to withdraw this as a plan to be offered to its membership.

▶ Dr. Mixson, 427 Biltmore Way, Coral Gables 33134.

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The Technical Exhibit: Will It Follow the Dodo?

W. Dean Steward, M.D.

Technical exhibits, sponsored by ethical pharmaceutical houses, have been a part of state medical association meetings for many years. How many I cannot say, but I know they have been present for 38 of the last 40.

Ofttimes the technical exhibit is the only exposure that some physicians have to representatives of the ethical drug houses, due either to the type of practice they have, their isolation, their preferences, or to lack of time. Here there is an opportunity to see what new drugs are on the market, to view new and advanced instruments, and to scan publications of the leading medical book publishers. The opportunities should not be lost by default.

Many Association members do not realize that the booth rental fees paid by the technical exhibitors in large measure meet the overall expenses of the Association in staging the state annual meeting. Were this help not ethically available, the cost would have to be borne entirely by the members of the Association, and in effect would amount to several dollars per member out of the annual budget. Some state medical associations have found this out due to withdrawal of support by pharmaceutical and surgical supply houses because of rising costs, lack of physician support, and in some cases actual discourtesy.

This situation can be alleviated in large part by scheduling meetings to allow adequate time to visit the exhibits, mentioning them at the time of the scientific meetings and in the handbook or program, and by physician interest. Naturally the last is of greatest importance, takes only a little time, and may be rewarding in more ways than one.

Dr. Steward is Past President, Florida Medical Association.

Dr. Steward, 32 West Sturtevant Street, Orlando 32806.

Our Mail

Mr. Bryant English, Chief
Medical Photography
Duval Medical Center
2000 Jefferson Street
Jacksonville, Florida 32206

Dear Mr. English:

We would like to extend our warm appreciation for your contribution to the cover of the February issue of the Florida Medical Journal.

It was only after this issue had gone to press that we discovered that you had helped Bill Brinkworth at Convention Press to obtain such a clear photographic print of the heart x-ray. All of us connected with the Journal were highly pleased with the result.

Under separate cover, we have forwarded you a copy of the issue.

I hope you will accept my best wishes and thanks on behalf of the editorial board and staff.

Franz Stewart, M.D.
Editor

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Florida Medical | editorial

From the Editor

Franz Stewart

April Cover

The exploration of life and the wonder of living is a fragile leaf held at least once by each of us. The facts of the moment, with dreariness and smog, do not always conceal the truths of life. Man is but one, and the joys of the earth are many.

Our Task is the Task of Man

Our profession concerns itself with man. Start with a genetic pattern completely programmed for the future by the input of protein moieties from the germ cells. Thus the individual is predetermined and the future of the race foretold by the sum total of genetic input at a given time, plus that held in germ cells not yet fed into the DNA-RNA computer. This is just the starting point. Our profession is not cajoled by this simplex.

If a given genetic pattern avoids thalidomides, certain viruses, starvation and abortion, it may fit into a place in its environment until this locale changes by birth, smog, epidemic or the difficulties presented by other protein moieties too directed or too numerous to permit survival.

We are concerned with making changes in harmful environmental influences, be they virus, projectile, drug, other people, or boredom. This is no place to stop.

Our profession concerns itself with man as a genetic pattern, with his adjustment to environment and with attention to the environment to guide its change to the needs of life. The physician cannot control, but supplies bandages for environmental injuries, and can aid in the adjustment of the environment to the future of the race and the joy of the individual. This is the task of man.

March Cover

The view of the Everglades seen on the cover of June '68 pointed out the joy of an area and its fragile nature. The cover in March '70 shows the same area two hours later as dusk approached. With the passage of time and the threat of progress the area is still present to capture a moment of joy.

Changing Roles and Goals

Clyde M. Collins, M.D.

The second Florida State Physician-Nurse Conference sponsored jointly by the Florida Nurses Association and the Florida Medical Association Committee on Nursing was conducted last October in Tampa. It was attended by a large group of interested and participating doctors and nurses.

At the general session, an inspiring address was given by Miss Barbara Schutt, R.N., editor of the American Journal of Nursing, who stated that the combined functions of the nurse and the doctor are interwoven and a great gap exists between the care we all know how to give and what's actually received by the patient. More money and more people are not the answer but major changes are needed because of the present inadequate and fragmented health care. Nurses are exploited by hospitals into housekeepers, assistant administrators, supervisors, engineers or orderlies. Yet nursing care is the crying need of the present-day health facility. She urged that physicians and nurses spend more time in joint discussion as to the best ways to meet our common problems.

Dr. William G. Crook, of the American Academy of Pediatrics Health Manpower Council, presented a plan for the development of allied health personnel using trained pediatric nurse practitioners to work with physicians in private practice and public health facilities. Ranging in experience and training from a high school graduate to the holder of an R.N. diploma, these assistants could be relegated varying responsibilities from obtaining medical histories to clerical and minor technical functions. "Using the nurse practitioners," Dr. Crook said, "would result in a doubling of the quantity of professional level health care for the nation's children at a relatively low cost, for the trainees could be educated to diagnose, counsel and treat three quarters of all children coming into a health station, give total care to well children and evaluate and manage many sick or injured children." Pediatricians using these associates have found that they can see at least one third more patients and have at least one third more time available than they formerly had. Dr. Richard E. Gordon, medical director of computer sciences at the University of Florida College of

Medicine, presenting a new path to modern health care, suggested that we introduce industrial revolution to health services. He described how prevention of serious illnesses by physicians with assistance from multiphasic screening and periodic monitoring could be done in a matter of minutes, markedly decreasing the cost of patient care. It only is successful, he emphasized, if the patient is referred by an M.D. who can interpret the printout and initiate treatment for the conditions detected.

Overheard in discussion group reports, sometimes repeatedly, were such remarks as: "There are not enough nurses working and those who do practice nursing are not properly trained, properly utilized or properly motivated. If hospitals were to raise the salary levels for nurses, the shortage would be solved overnight." Other participants disagreed, saying that nurses stop working because of inadequate definitions of their role in the organization where they are employed, due to lack of communication, lack of coordination and unreasonable demands. Physicians want individualized care for their patients, whereas hospital administrators and nursing service staffs stress use of routines and explicit regulations. Nurses frequently carry responsibilities for the well-being of patients during long periods when physicians are not in attendance. Yet specific details about each patients' illness are often unknown to the nurse unless the physician takes time to voice idiosyncrasies, fears, phobias and impressions that he didn't put on the chart. The interpretation of a physician's orders by three different shifts of nurses in a 24-hour period suggests that they are often understood in terms of each nurse's own education. Nurses are more often rewarded for organizational skills rather than for clinical competence, and those who might well become the best clinicians and communicate most effectively with physicians are drained away from direct patient care.

While physicians are usually self-employed and responsible only to their peers, nurses are employees in an unusual position, under the jurisdiction of three separate masters: the hospital administration, nursing service and medical staff. Trying to unify the expectations of all three can be very frustrating for the nurse caught in a set of conflicting demands often resulting in resentment which creates barriers to communication. Nurses at the conference agreed that their colleagues would like to be considered as independent professionals, working as a member of the health team and not as the hospital's lackey, the patient's servant, nor the physician's technical aide. They seemed to think that their training had been for the purpose of supplying a unique and oftentimes unmet service in the hospital-physician-nurse triad of medical care, that of comforting the patient. As they talked, it appeared that undermining the morale of their profession was an increasing loss in the self-satisfaction derived from being able to follow the patient's progress from severe illness to health as a result of their care. Yet with all their additional education, responsibility and authority, the ladies in white are being increasingly promoted away from the bedside. Perhaps sadly, this is a normal evolution in the changing world of professional nursing.

Reorganization of nursing departments with proper utilization of registered nurses relegating specific tasks to L.P.N.'s and aides was suggested as making available two to three times the present supply of nursing manpower. Increasing hospitals' usage (through influence by their medical staffs) of progressive patient care, intensive, coronary and other specialized care wards all were recommended. Further exploration of the feasibility of establishing clinical board specialties for nurses should be studied. Joint clinical workshops on a statewide and district level were advised to assist in improving communications, since for every medical care problem, there is a nursing care problem and in analyzing and refining the common problems, joint solutions could be reached by sharing understanding through the use of a common language.

In protest, at the conclusion of the conference, it was asserted that the same old cliches had been voiced; hospitals were continuing to find it difficult to keep nursing personnel because of low pay, inadequate recognition and underutilization of skills. Unhappiness with the traditional ambivalence of doctor-nurse relations was continuing to demoralize many in the nursing profession and no new solutions to these problems had been unearthed.

Yet along with the old, new ideas *were* discussed, and suggestions, problems and recommendations were expounded on, objected to and defended in detail. If only more nurses, more hospital administrators and more doctors could more often assemble to initiate dialogue about their many mutual problems, it may inform each a little, for to communicate is to begin to understand. □

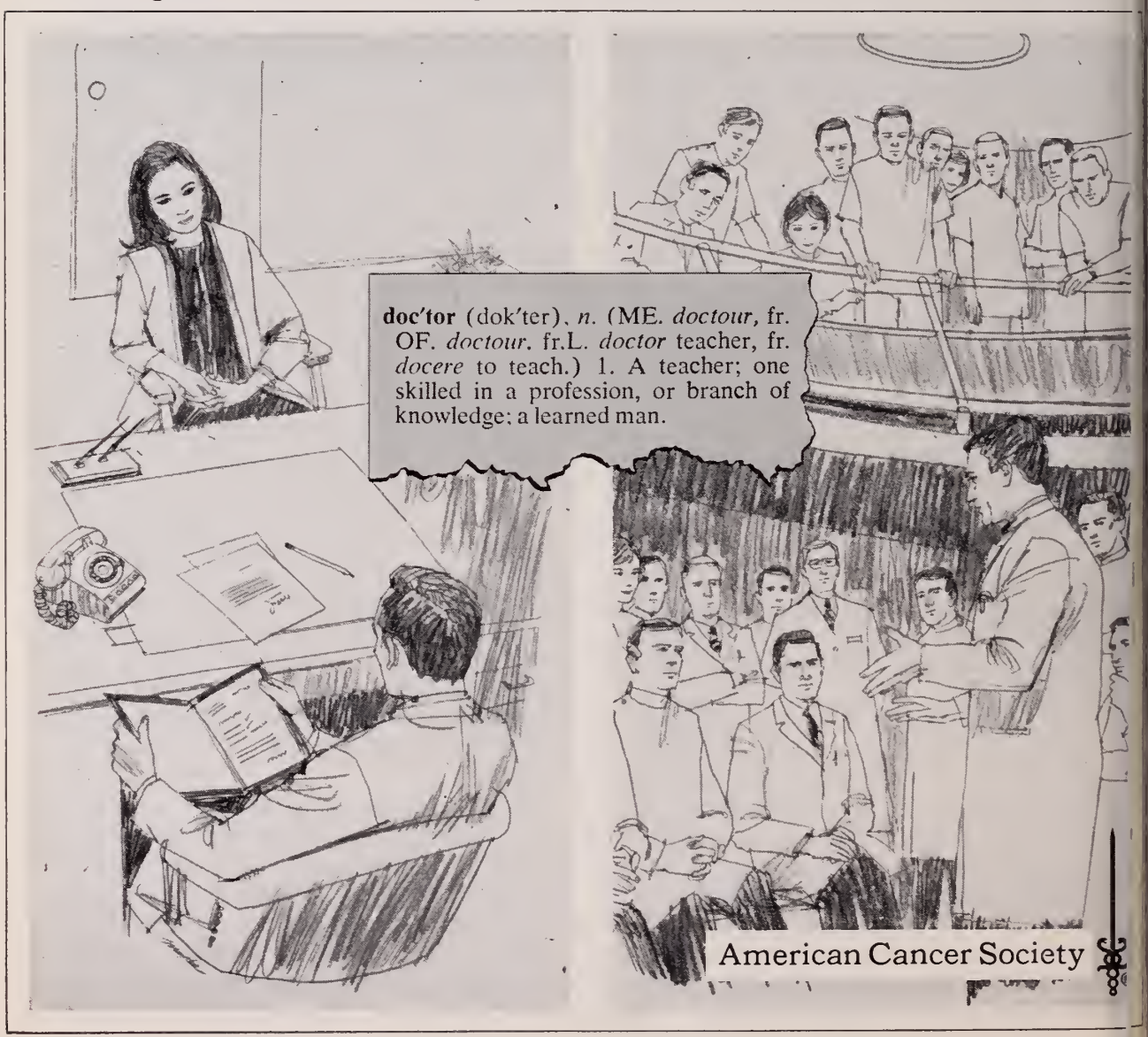
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Florida Medical books received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Co., 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Co., 1968.

Internal Medicine Based on Mechanisms of Disease edited by Peter J. Talso, A.B., M.D., F.A.C.P., F.A.C.C. and Alexander P. Remenchik, B.S., M.D., F.A.C.P. Pp. 797. 164 illustrations. Price $17.50. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Synopsis of Pathology by W. A. D. Anderson, M.D. and Thomas M. Scotti, M.D. Pp. 957. 7th Ed. 408 illustrations. Price $10.50. St. Louis, The C. V. Mosby Company, 1968.

Shakespearean Medicine, Modernized by William H. Turnley, M.D. Pp. 274. Price $5.00. New York, Vantage Press, Inc., 1968.

Paediatric Cardiology Edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

1970-1971 Drugs of Choice edited by Walter Modell, M.D. Pp. 924. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th Ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

Infection Control in the Hospital by American Hospital Association. Pp. 140. Price $3.75. Chicago, American Hospital Association, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Drugs on the College Campus by Helen H. Nowlis, Ph.D. Pp. 144. Price $.95. New York, Doubleday & Co., Inc., 1969.

Physiology of the Gastrointestinal Tract by E. Clinton Texter Jr., M.D., Ching-Chung Chou, M.D., Higino C. Laureta, M.D., and Gaston R. Vantrappen, M.D. Pp. 262. 106 illustrations. Price $10.75. St. Louis, The C. V. Mosby Company, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 by Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Medical Interviewing by Robert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Practical Urology by Chester C. Winter, M.D. Pp. 249. Price $11.00. 251 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Essentials of Gastroenterology by J. Ned Smith Jr., M.D. Pp. 326. Price $14.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Atlas of Obstetric Technic by J. Robert Willson, M.D., M.S. 2nd ed. Pp. 313. 375 illustrations. Price $19.75. St. Louis, The C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Atlas of Human Electron Microscopy by Ruben P. Laguens and Cesar L.A. Gomez Dumm. Pp. 180. Illustrated. Price $20.50. St. Louis, The C. V. Mosby Company, 1969.

Plastic and Maxillofacial Trauma Symposium, Nicholas G. Georgiade, editor. Pp. 221. Price $25.00. 390 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

A Synopsis of Contemporary Psychiatry by George A. Ulett, M.D. and D. Wells Goodrich, M.D. Pp. 340. Price $9.50. St. Louis, The C. V. Mosby Company, 1969.

Genetics and Counseling in Medical Practice by Leonard E. Reisman, M.D. and Adam P. Matheny Jr., Ph.D. Pp. 215. Price $12.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Infectious Diseases and General Medicine, Vol. III. Prepared and published under the direction of Lieut. General Leonard D. Heaton. The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969.

Prematurity and the Obstetrician by Denis Cavanagh, M.D. and M. R. Talisman, M.D. Pp. 542. Price $16.50. Illustrated. New York, Appleton-Century-Crofts, Division of Meredith Publishing Company, 1969.

Physical Diagnosis by John A. Prior, M.D. and Jack S. Silberstein, M.D. Pp. 436. Price $10.50. 454 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Organization and Administration of Health Care by Richard L. Durbin, A.B., M.B.A., M.P.A., and W. Herbert Springall, A.B., M.P.H. Pp. 258 Price $9.85. 51 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Symposium on the Spine by American Academy of Orthopaedic Surgeons. Pp. 289. Price $19.50. 558 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Morris Fishbein, M.D., An Autobiography, by Morris Fishbein, M.D., Pp. 505. Price $10.00. 24 Illustrations. New York, Doubleday & Company, Inc., 1969.

Symposium on Retina and Retinal Surgery— Transactions of the New Orleans Academy of Ophthalmology. Pp. 406. 372 illustrations. Price $29.50. St. Louis, The C. V. Mosby Company, 1969.

Personnel Administration and Labor Relations in Health Care Facilities by James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Mosby Company, 1969.

book review | Florida Medical

Therapeutic Radiology by William T. Moss, M.D. and William N. Brand, M.D. 3rd ed. Pp. 564. Price $22.50. 303 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Dr. Moss states in the preface to the first edition, "This book is not a recipe for radiotherapy . . . it expresses a philosophy of radiotherapy which I hope will lead to improved patient care." Cancer in its various forms is the number two killer of adult Americans. One half of these patients, including a substantial number of those cured, will be treated by radiation at some stage of their disease.

While chapters devoted to various diseases and organ systems discuss combinations of surgical and radiation therapy, a separate chapter on this topic emphasizes the rationale and clinical logic of the combined approach as well as the principles and relative merits of preoperative and postoperative radiotherapy. Most of the individual chapters also discuss the relative merits of radiation and surgical treatment as the only therapy of the particular disease. Many sections have been slightly revised to include the high energy techniques such as cobalt and megavoltage which are now readily available and are indicated for radical treatment of cancer today. Survival and treatment statistics have been updated to include new data available since the last edition. A new chapter has been added on radiotherapy of prostate cancer which is coming into wider use. Another new chapter describes the effects of radiation on the heart and blood vessels. This has become a vital topic as we see more and more patients aggressively treated for mediastinal lymphomas and lung cancer. International TNM staging has been introduced in several areas where the data are applicable. The current third edition, like the earlier ones, contains detailed discussions of the effects of radiation on normal tissues necessary to understand the side effects and complications of treatment.

Because of the greater availability of effective radiotherapy every physician who refers or treats a cancer patient should know all he can about radiotherapy. Of the several modern radiotherapy texts available, "Therapeutic Radiology" is the most readable for the non-radiotherapist.

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REFERENCES: (1) Sands, R.X.: New York St. J. Med. 61:2598-2602, 1961; (2) Renner, M.J., et al.: Hosp. Topics 39:71-73, 1961; (3) Haas, Jr., J., and Kay, L. L.: Southwest Med. 42:30-32,1961; (4) Marshall, W.: Clin. Med. 7:499-502, 1960; (5) Strauss B.: Clin. Med. 4:307-310, 1957.

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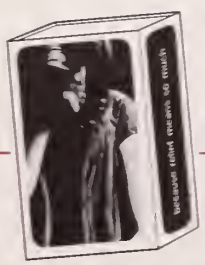
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MAR. 1

Florida Medical deaths

Bradshaw, Donald G., Tampa; born 1909, University of Chicago, 1942; member AMA; died July 21, 1969.

Butt, Thomas Cecil, Orlando; born 1908; Tulane University, 1937; member AMA; died January 8, 1970.

Byrd, Mark M., West Palm Beach; born 1899; Emory University, 1925; member AMA; died December 18, 1969.

Carswell, A. Paul Jr., Cocoa Beach; born 1929; Duke University, 1956; member AMA; died December 1, 1969.

Cerrato, Calvin M., Fort Myers; born 1905; Harvard Medical School, 1936; member AMA; died July 14, 1969.

Clayton, James M. Jr., Lakeland; born 1916; Medical College of Georgia, 1952; member AMA; died February 16, 1969.

Cobos, Limbana, Tampa; born 1919; Havana University, 1950; member AMA; died May 22, 1969.

DePadua, Virgilio B., Jacksonville; born 1923; University of Philippines, 1945; member AMA, died January 16, 1970.

Duncan, William P., Tampa; born 1896; Emory University, 1924; member AMA; died July 31, 1969.

Dyrenforth, Lucien Y., Jacksonville; born 1894; Emory University, 1930; member AMA; died January 22, 1970.

Elgin, Lee W. Sr., Miami; born 1899; University of Maryland, 1925; member AMA; died October 7, 1969.

Fomon, John J., Miami; born 1922; Georgetown Medical School, 1946; member AMA; died November 11, 1969.

Harris, John E., Sarasota; born 1897; Emory University, 1919; member AMA; died December 18, 1969.

Haverfield, W. Tracy, Miami; born 1910; Ohio State University, 1936; member AMA; died November 11, 1969.

Marcus, Nathan L., Tampa; born 1910; University of Louisville, 1934; member AMA; died November 1, 1969.

Massey, James L., Quincy; born 1912; Tulane University, 1936; member AMA; died December 6, 1969.

Matthews, John B., St. Petersburg; born 1880; Rush Medical College, 1903; member AMA; died October 27, 1969.

Pohlman, Louis E., Orlando; born 1918; St. Louis University, 1944; member AMA; died January 29, 1970.

Regan, Joseph J., Tallahassee; born 1916; Jefferson Medical College, 1941; member AMA; died December 4, 1969.

Rinaman, James C., St. Cloud; born 1903; Tulane University, 1932; member AMA; died November 11, 1969.

Sory, Curtis H., Fort Lauderdale; born 1908; University of Tennessee, 1932; member AMA; died September 9, 1969.

Twigger, Norman A., Fort Lauderdale; born 1908; Pittsburgh University, 1945; member AMA; died November 27, 1969.

Watson, Francis M., Marianna; born 1905; Medical College of Georgia, 1930; member AMA; died December 18, 1969.

Welch, William B., Miami; born 1926; Northwestern University, 1949; member AMA; died November 4, 1969.

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Association Will Nominate Jere W. Annis, M.D. As President-Elect of AMA

Francis T. Holland, M.D.

The Florida Medical Association will nominate Dr. Jere W. Annis of Lakeland for the office of President-Elect of the American Medical Association at the annual meeting this June in Chicago. Three well known members of the Board of Trustees have announced their intention of running for this office also. They are fine men but in the troubled times ahead there may be some advantage in having the official representative of the Association assume that office directly from membership in the House of Delegates, without previous indoctrination and tenure on the Board.

Dr. Annis has been a member of the House of Delegates for the past eight years and has been active in its affairs and sensitive to its deliberations. His background is replete with service to organized medicine in many capacities. As a board certified internist, he is in the private practice of medicine in a 50-man multi-specialty group. He is a Fellow of the American College of Physicians and the College of Cardiology, as well as a member of the American Society of Internal Medicine which he has served as legislative chairman.

He is a Past President of the Florida Medical Association and a past chairman of its Judicial Council, Legislative Council, Committee on Scientific Work, and recipient of its A. H. Robins Company Award for outstanding community service by a physician. He served for five years as vice president of Blue Shield of Florida, Inc., and for nine years as a member of the State Welfare Board. He is a past president of the American Association of Medical Clinics and was a member of the American Medical Association Speakers Bureau. He is a member of the executive committee of the Conference of State Presidents and Officers of State Medical Associations. He served in the Army Medical Corps five years during World War II, attaining the rank of Lieutenant Colonel.



Dr. Annis

Because of his varied experience and background in professional, executive and administrative capacities, Dr. Annis is particularly qualified to give the AMA vigorous, competent leadership, representative of the grass roots of American medicine.

This nomination has the enthusiastic support of the FMA Board of Governors and AMA delegates from Florida.

Dr. Holland, 1307 Miccosukee Road, Tallahassee 32303.

Dr. Holland is chairman of the delegates from Florida to the House of Delegates, American Medical Association.

Jere Annis: A Personal View

James T. Cook, M.D.

I find it hard to realize, but there are a lot of members of the FMA who wonder who Jere Annis is; why do our AMA delegates have the temerity to nominate another Floridian as President-Elect of the AMA?

We who have been daily associated with Jere over the past two decades understand this better. Jere has the qualities we need in a president. Not many people have.

Essentially, I think Jere Annis is a modest man. I sincerely doubt that he has ever truly aspired to be president of the AMA. He is confident in himself; he knows what he can do, and does it well. But Jere is not, like Caesar, the victim of ambition.

He has a wife ("Tink") and four children. He is a devoted family man, although for the life of me I can't see how he has time to be with all his activities. As most of you know, he is a Past President (1958) of the FMA, of the Florida Heart Association, and of many other organizations. Indeed, his curriculum vitae is so long, it gets boring —sort of like reading statistics. Looking it over, it seems that if Jere joins an organization, he is doomed to be president of it sooner or later.

He is articulate. I have on occasion been on the opposite side of a question from Jere. Usually I get clobbered. I have thought—and still think—that my side was as strong in facts as his. Without oration, without strong emotion—indeed, without raising his voice—Jere can sell his thinking far better than most accomplished orators. Only once have I known him to raise his voice; his final speech as President of the FMA was a resounding success, and this once his voice boomed out. But if you wish to win a debate, don't put yourself in the position of adversary to Jere Annis.

Having known Jere for many years, I believe he can be classified as a conservative politically, perhaps a moderate conservative. Certainly not a liberal. He is more adaptable probably than most of us, however. He has the ability to live with the fact that his views don't always prevail, and he can work and compromise with—to the advantage of his side—those whose views have prevailed. He can do this without sacrificing principle, for Jere is a man of strong principles.

A man of conservative philosophy, of strong sense of principles and with adaptability and eloquence, needs only one other attribute to be a good leader. Jere has this attribute. The combination of knowledge gained over many years' service to all of us in organized medicine, as well as other fields; of experience as a leader in innumerable organizations, both medical and otherwise; of intelligence—which he had to begin with —these then have given Jere Annis the rarest and most sought attribute for a president of the AMA —Jere has wisdom. I doubt if either his friends or even his opponents (he has few enemies) can gainsay this.

Now I've never been a worshiper of Jere Annis. I consider him a good friend. But he is not infallible and I have at times strongly disagreed with him. This in no way detracts from my firm belief that our delegation to the AMA is making no mistake. There is a feeling in many areas that the AMA needs strong aggressive leadership. Florida is making this available to the AMA.

Dr. Cook is President-Elect, Florida Medical Association.

▶ Dr. Cook, P.O. Box 860, Marianna 32446.



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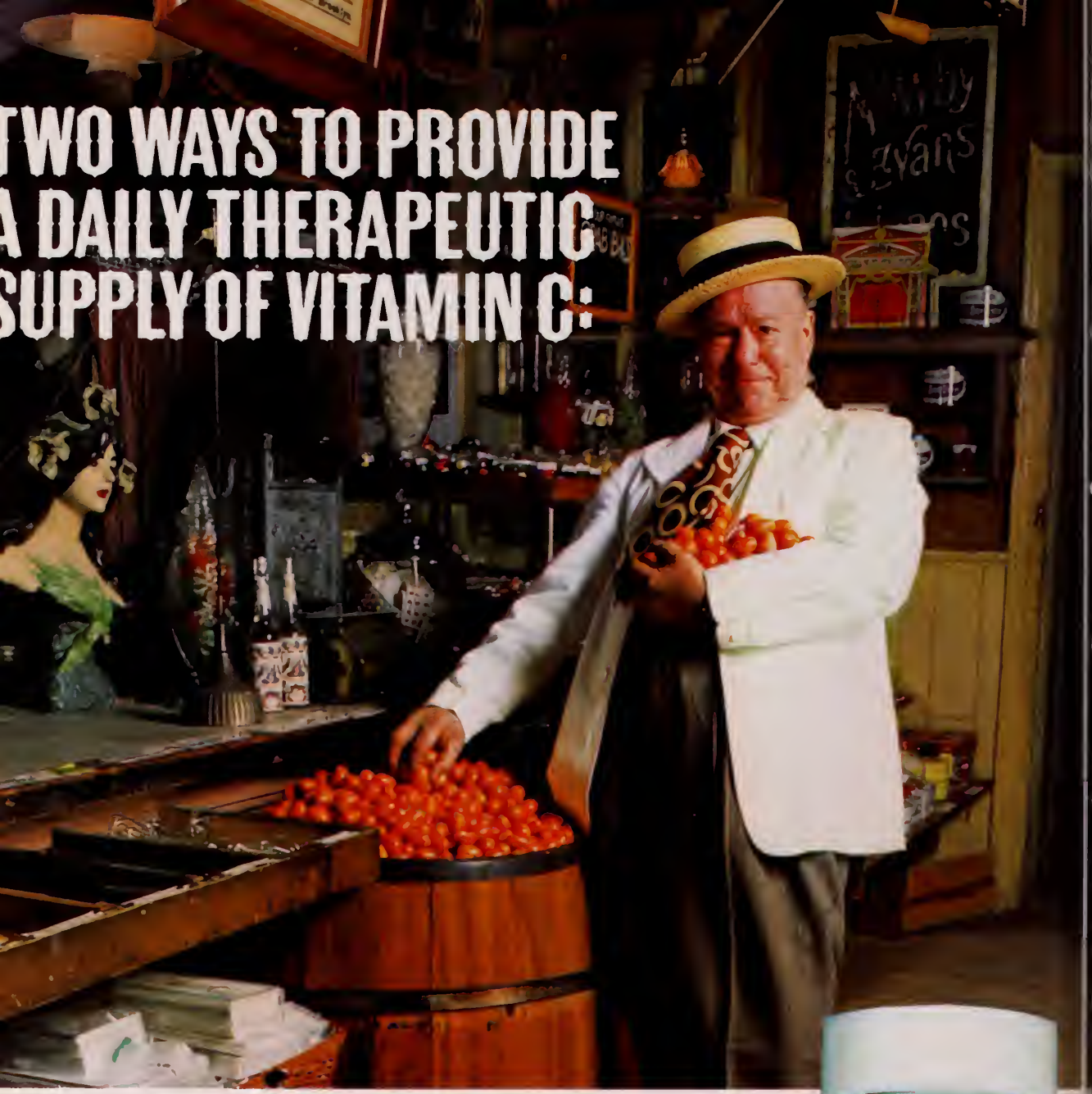
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Highlights of 12th Annual Conference for Presidents and Secretaries of County Medical Societies

Albert J. Menendez

This year's conference, held January 31 in Orlando, maintained the tradition of a satisfying interchange of ideas among the participants. A wide range of topics was discussed, and it is hoped that delegates representing the county societies received insight into some of the contemporary problems and programs of the Florida Medical Association. There was, as expected, good attendance at most of the presentations.

After introductory remarks by FMA President Dr. Henry J. Babers, Dr. Frank L. Creel of Pensacola reviewed some of the historic objectives of the voluntary health movement. He traced the origin of the FMA Council on Voluntary Health Agencies and related it to the traditional American concept of working together to solve common problems in a voluntary positive framework. Dr. Creel appealed for more local efforts to establish meaningful future programs. He also mentioned recent achievements in the voluntary health field and some recent AMA activities. Dr. Creel closed his presentation by informing the participants of the existence of President Nixon's National Program for Voluntary Action, which is envisioned as a renewal of the private independent sector in the resolution of many of America's problems.

Following Dr. Creel, Mr. Leyton Hunter, president of the London Agency, Atlanta, discussed escalating claims and malpractice insurance costs. Dr. Vernon B. Astler of Boynton Beach, chairman of the Committee on Hospitals and Extended Care Facilities, discussed many aspects of physician-hospital relations, including such areas of concern as the incorporation of medical staffs and the development of model bylaws. Dr. Sanford A. Mullen of Jacksonville, chairman of the Committee on State Legislation, enumerated the objectives of the FMA's 1970 legislative program. Dr. Mullen reviewed recent developments in establishment of the Association's new Tallahassee office and the enhanced liaison and field work maintained by the capitol office. Mrs. C. H. Gilliland, president of the Woman's Auxiliary, discussed the positive part that the Woman's Auxiliary plays in developing sound public relations. She pointed out the community service in the various fund-raising projects and the charitable and philanthropic efforts of the Auxiliary.

One of the really outstanding addresses was Dr. Ernest B. Howard's presentation on "The National Medical Scene." Dr. Howard, executive vice president of the American Medical Association, focused on what he termed the major problem in the medical scene today, namely the acute imbalance between supply and demand in medical services. He noted that several confrontations were causing great concern: the escalating demand for services vis-à-vis the relatively inadequate supply; the differences between quality and quantity in medicine, and the prevailing problem of expectation versus realization. Dr. Howard next reviewed the various national health insurance plans which have been proposed in recent months, including the Rockefeller proposal, Reuther plan, Ted Kennedy proposal, and AMA's own tax credit legislation. Dr. Howard also discussed some of the problems relating to hospital costs, physician fees, prepaid insurance plans, necessity of increasing the number of physicians in the United States, and some recent AMA public relations activities. Dr. Howard ended on a hopeful, optimisitc note when he stated that "Our resources can meet the challenge of the 1970's."

During the afternoon session, Dr. H. Phillip Hampton, former FMA President, and Mr. Joe Stansell, vice president for physician affairs of Blue Shield of Florida, discussed various aspects of peer utilization review in Medicare, Medicaid, Blue Shield and commercial health insurance. Dr. Jack A. MaCris of St. Petersburg, chairman of the Council on Medical Economics, reviewed some of the trends in the socioeconomic aspects of medicine. Dr. Fred A. Butler of Naples, chairman of the Committee on Relative Value Studies, and Dr. Joseph G. Matthews of Orlando, chairman of the Council on Specialty Medicine, discussed the updating of the FMA Relative Value Studies and the current status of the Workmen's Compensation program.

Mr. Menendez is former program analyst, Florida Medical Association.

James A. Bax, Ph.D., secretary of the state's Department of Health and Rehabilitative Services, discussed some of his recent attempts to rationalize and improve the administrative aspects of his department. He emphasized the need to coordinate the goals and policies of the department with organized medicine. Dr. Granville W. Larimore, state director of the Florida Regional Medical Program, closed the afternoon session with a review of the recent activities of that program.

Another significant highlight of this year's conference was an affiliated Sunday morning Seminar on State Legislation. The FMA was pleased and honored to have as guest speakers from the Florida legislature the Honorable John E. Mathews, president of the Senate, and the Honorable Fred H. Schultz, speaker of the House. At the seminar Dr. Francis C. Coleman of Tampa, chairman of the Committee on Blood, discussed the plasmapheresis controversy; Dr. Joseph C. Von Thron of Cocoa Beach, chairman of the Council on Legislation and Public Agencies, discussed the current status of the osteopathic hospital bill, and Dr. Louis C. Murray of Orlando reviewed the prospects of the chiropractic insurance bill. Other presentations included a recapitulation of the activities of the FMA capitol office by Mr. Donald S. Fraser Jr., director of the FMA Public Affairs Department, and a discussion of the capitol dispensary and visiting physicians programs by Dr. Francis T. Holland of Tallahassee.

The major emphasis of the seminar was on the complex question of professional liability and the ensuing FMA attempts at legislative amelioration. Mr. Robert Fokes, FMA legislative legal counsel in Tallahassee, presented the general context of specific bills which the FMA will sponsor in the 1970 session. Considerable discussion was held on the subject of professional liability and malpractice insurance. Participants in the seminar were also given permanent FMA legislative manuals for informational use during the coming session.

Most individuals attending agreed that it was a timely and relevant conference.

▶ Mr. Menendez, 23 Lexington Avenue, New York, New York 10010.

FMA Meetings

April 4, 1970	9:00 a.m.	Statewide Conference on Plasmapheresis (Committee on Blood)	Sheraton-Jacksonville Hotel, Jacksonville
April 4, 1970	10:00 a.m.	Judicial Council	FMA Headquarters Building, Jacksonville
May 3, 1970	10:00 a.m.	School Health Medical Advisory Committee (Committee on Child Health)	FMA Headquarters Building, Jacksonville
May 6-10, 1970		FMA Annual Meeting	Diplomat Hotel, Hollywood
May 21, 1970	10:30 a.m.	Florida Committee on Rural Health (Committee on Rural Health)	Site to be selected
June 2, 1970	10:00 a.m.	Florida Joint Council on Health of the Aging (Committee on Aging)	FMA Headquarters Building, Jacksonville

Schedule Of Activities

FLORIDA MEDICAL ASSOCIATION ANNUAL MEETING

Diplomat Hotel, Hollywood-by-the-Sea, May 6-10, 1970

WEDNESDAY, MAY 6

10:00 a.m. General Registration and Delegates Registration, Lobby, Convention Hall
2:00 p.m. Delegates Registration, Corridor to Convention Hall
4:00 p.m. First House of Delegates, Regency Room

THURSDAY, MAY 7

8:00 a.m. Annual Meeting, Blue Shield, Regency Room
9:00 a.m. Exhibits Open Daily until 4:30 p.m.
9:30 a.m. Reference Committee No. 1, Convention Hall, Room A
Reference Committee No. 5, Card Room
10:00 a.m. Reference Committee No. 2, Convention Hall, Room B
Reference Committee No. 4, Embassy Room, East/West
10:30 a.m. Reference Committee No. 3, Tack Room
2:00 p.m. Scientific Sections, Convention Hall

FRIDAY, MAY 8

9:00 a.m. Scientific Sections and Specialty Groups, Convention Hall/Regency Room
11:00 a.m. General Session (Baldwin Lecture), Regency Room
12:15 p.m. Woman's Auxiliary and FLAMPAC Luncheon, Les Ambassadeurs
2:30 p.m. Scientific Sections and Specialty Groups, Convention Hall/Regency Room
6:30 p.m. President's Reception, Poolside/Alternate, Regency or Lobby
7:30 p.m. Alumni and Fraternity Socials

SATURDAY, MAY 9

9:00 a.m. Scientific Sections and Specialty Groups, Convention Hall/Regency Room
1:00 p.m. Specialty Groups, Convention Hall/Regency Room
1:00 p.m. Delegates Registration, Corridor to Convention Hall
3:00 p.m. Second House of Delegates, Regency Room
Evening Specialty Group Socials

SUNDAY, MAY 10

7:30 a.m. Delegates Registration, Corridor to Convention Hall
9:00 a.m. Third House of Delegates, Regency Room

VISIT EXHIBITS 9:00 AM.-4:30 P.M. DAILY

Annual Meeting Fishing, Golfing and Tennis Tournaments

As in past years, fishing, golfing and tennis tournaments will be held during the time of the Association's Annual Meeting May 6-10. These tournaments will be open to all physicians registered for the annual meeting and their families. Although details and application blanks will be available at the annual meeting registration desk in the Diplomat Hotel, preregistration is not only advisable but is requested by the respective tournament chairmen. Those interested in the fishing tournament should contact Hobart T. Feldman, M. D., 995 North Miami Beach Boulevard, North Miami Beach, Florida 33162, phone (305) 947-8411, for making reservations. Golfing tournament entrants should contact Henry D. Perry Jr., M.D., 6024 Washington Street, Hollywood, Florida 33023, phone (305) 989-0900. Those wishing to participate in the tennis tournament should contact Richard G. Connar, M.D., One Davis Boulevard, Tampa 33606, phone (813) 253-6001.

1970
FLORIDA MEDICAL ASSOCIATION
NINETY-SIXTH ANNUAL MEETING
Diplomat Hotel, Hollywood-by-the-Sea, Florida
May 6-10, 1970

	May 6 Wednesday	May 7 Thursday	May 8 Friday	May 9 Saturday	May 10 Sunday
A.M.	Set up EXHIBITS 10:00 General and Delegates Registration	8:00 Blue Shield Annual Meeting 9:30 Reference Committees Nos. V & I 10:00 Reference Committees Nos. IV & II 10:30 Reference Committee No. III VISIT EXHIBITS	9:00 to 10:45 Scientific Sections and Specialty Groups VISIT EXHIBITS 11:00 General Session (Baldwin Lecture)	9:00 Specialty Groups and Scientific Sessions VISIT EXHIBITS	9:00 Third House of Delegates
P.M.	4:00 to 5:30 First House of Delegates	2:00 to 5:00 Scientific Sections (Reference Committees, if necessary)	12:15 to 2:00 Auxiliary & FLAMPAC Luncheon VISIT EXHIBITS 2:30 to 5:00 Scientific Sections and Specialty Groups	1:00 to 2:45 Specialty Groups 3:00 Second House of Delegates	Post-Convention Board of Governors
EVE-NING			6:30 President's Reception 7:30 Alumni & Fraternity Socials	Dismantle Exhibits Specialty Group Socials	

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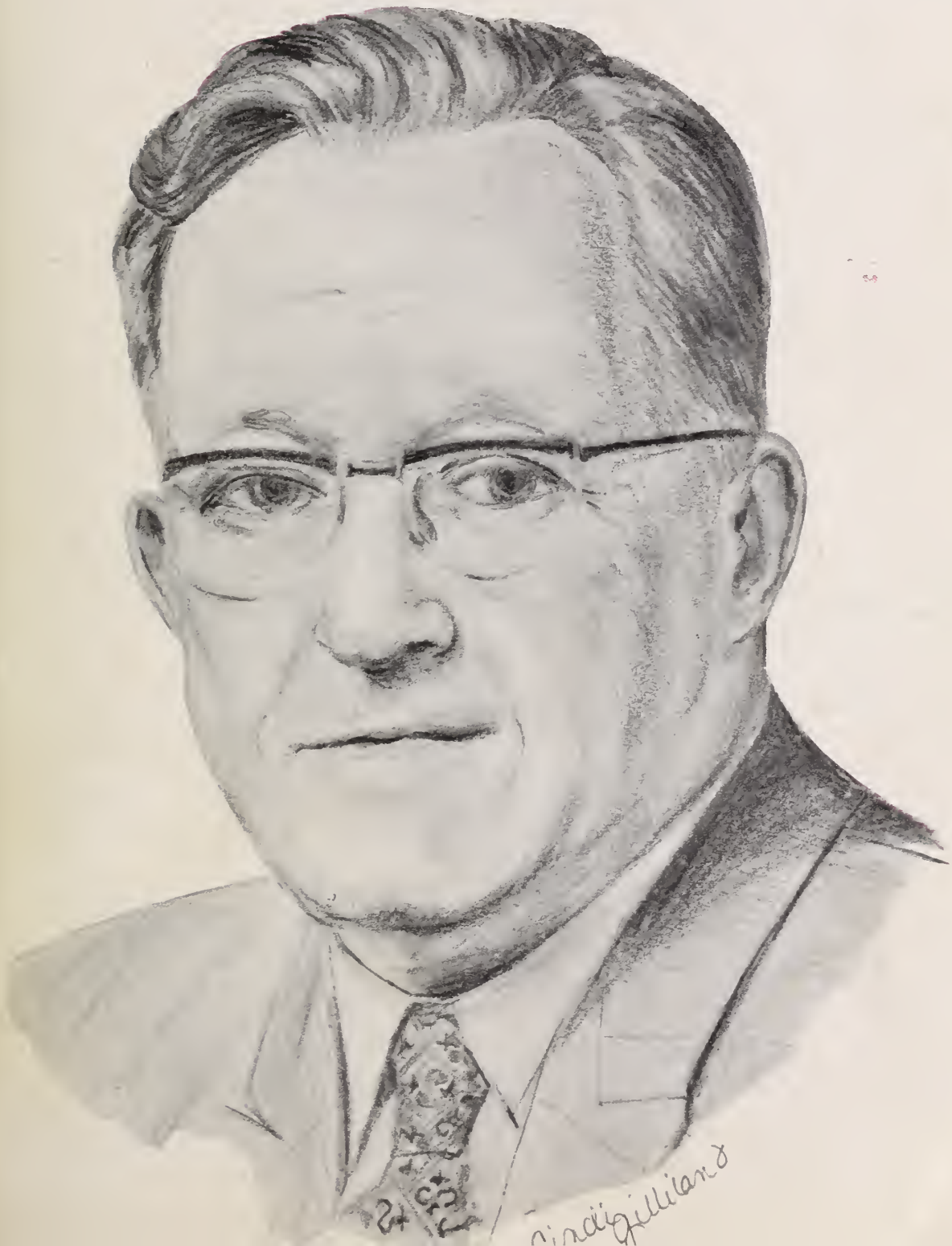


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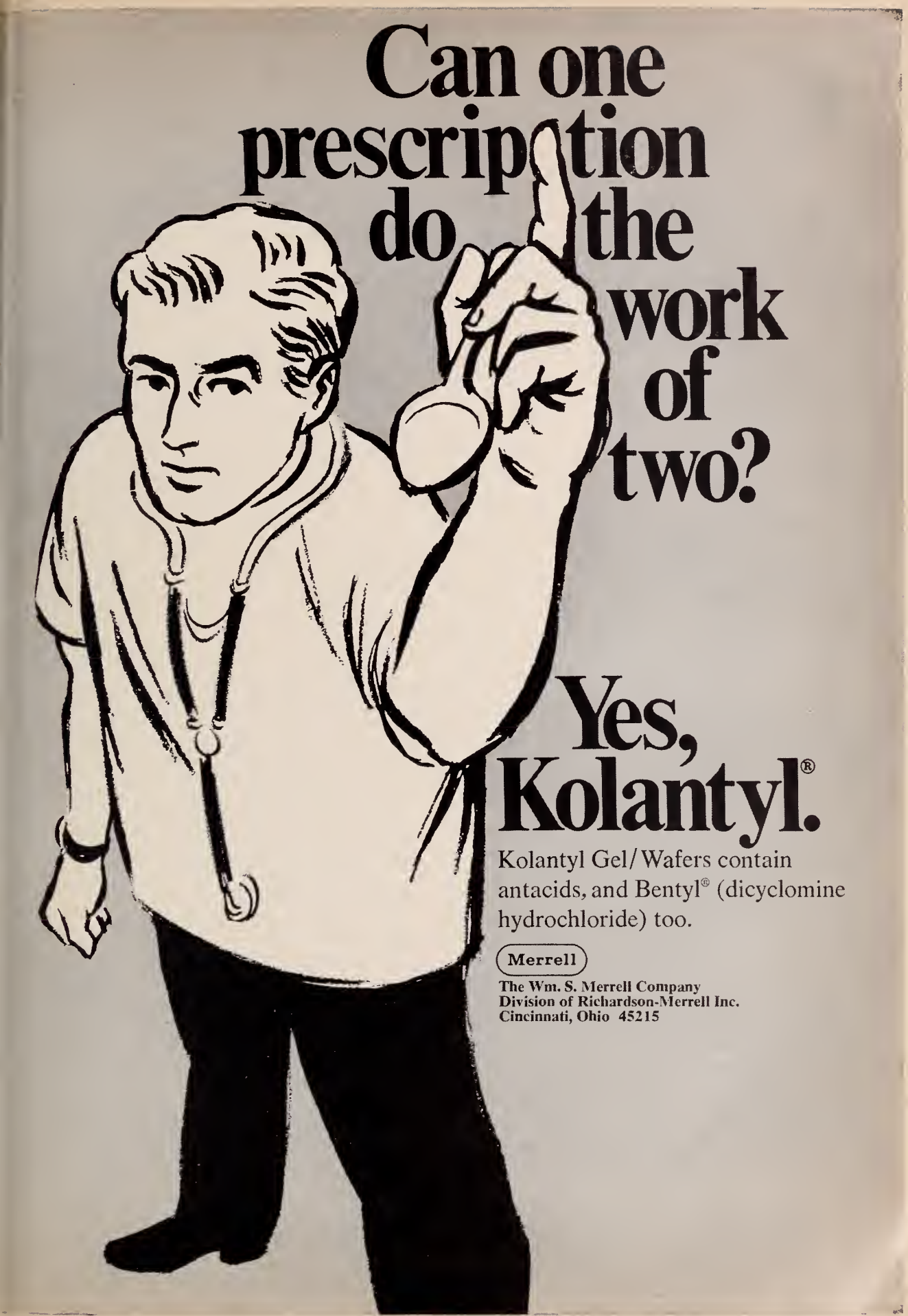
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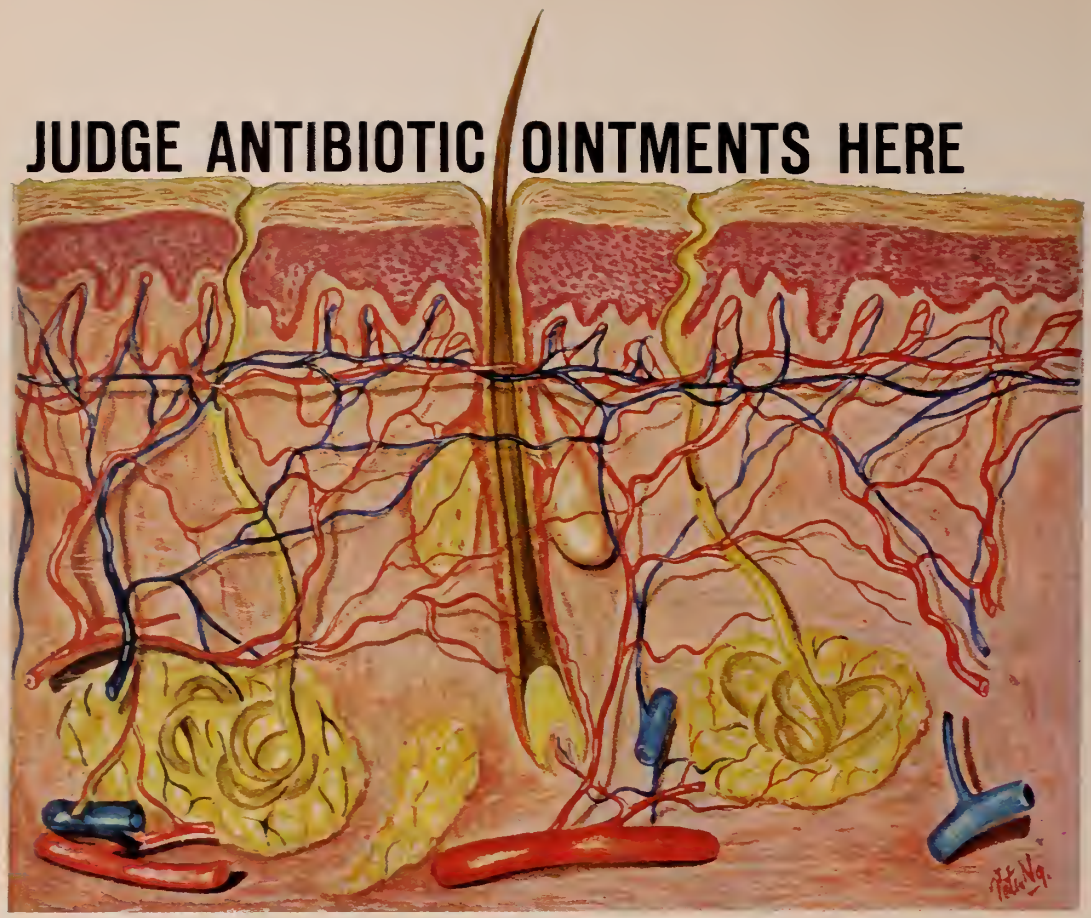
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Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

IN ASTHMA
IN EMPHYSEMA



optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

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Manufacturers of Ethical Pharmaceuticals



CAUTION:

OVEREATING MAY BE HAZARDOUS TO YOUR HEALTH.

According to the Framingham Heart Study, the obese face:

86% greater risk of angina pectoris,
82% greater risk of diabetes,
71% greater risk of coronary heart disease.*

Obesity may also aggravate osteoarthritis, flat feet, intertriginous dermatitis, varicose veins, and ventral or diaphragmatic hernias.[1-3]

y are considering weight reduction, consider

Preludin®

phenmetrazine hydrochloride

Endurets®

prolonged-action tablets

Often effective

Controlled studies in a general patient population have shown that when Preludin is used with diet, the rate of weight loss exceeds that obtained by placebo and diet.

Long acting

Slow, even release of the active principle usually suppresses appetite continuously for about 12 hours.

Once-a-day dosage

One Endurets tablet after breakfast. It helps reduce weight and costs, conveniently.

For contraindications, warning, precautions, and adverse reactions, please see the full prescribing information.
It is summarized on this page.

Where there's no will there's a therapeutic way.

*Among persons 20% or more overweight as compared with median weight for persons of like height and sex.

1. Kannel, W.B., *et al.*: *Circulation* 35:734, 1967.
2. Thomas, H.E., Jr., *et al.*: *Med. Times* 95:1099, 1967.
3. Albrink, M.J., in: Beeson, P.B. & McDermott, W. (eds.): *Cecil-Loeb Textbook of Medicine*, ed. 12, Phila.: W.B. Saunders Co., 1967.

Preludin®
phenmetrazine hydrochloride

Preludin is indicated only as an anorexigenic agent in the treatment of obesity. It may be used in simple obesity and in obesity complicated by diabetes, moderate hypertension (see Precautions), or pregnancy (see Warning).

Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.

Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks. There have been clinical reports of congenital malformation, but causal relationship has not been proved. Animal teratogenic studies have been inconclusive.

Precautions: Use with caution in moderate hypertension and cardiac decompensation. Cases involving abuse of or dependence on phenmetrazine hydrochloride have been reported. In general, these cases were characterized by excessive consumption of the drug for its central stimulant effect, and have resulted in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations or delusions. Do not exceed recommended dosage.

Adverse Reactions: Dryness or unpleasant taste in the mouth, urticaria, overstimulation, insomnia, urinary frequency or nocturia, dizziness, nausea, or headache.

Dosage: One 25 mg. tablet b.i.d. or t.i.d. Or one 75 mg. Endurets tablet a day, taken by mid-morning.

Availability: Pink, square, scored tablets of 25 mg. for b.i.d. or t.i.d. administration, in bottles of 100 and 1000.

Pink, round Endurets® prolonged-action tablets of 75 mg. for once-a-day administration, in bottles of 100 and 1000.

(B)R3-46-560-B

For complete details, please see full prescribing information.

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PR-7169



The pain of arthritis

relieved with MEASURIN® q. 8h. dosage

Double-strength Measurin timed-release aspirin offers a new kind of control for your arthritic patients. Each 10-grain tablet has over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means—fast relief, followed by long lasting relief. Throughout the day, Measurin gives your patients freedom from a 4-hour dosage schedule. Measurin can help your patients get a good night's sleep, uninterrupted by the need for an extra dose of aspirin. And, taken at bedtime, it also helps ease morning joint discomfort and stiffness.

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MEASURIN®
TIMED-RELEASE ASPIRIN
ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF
Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief and to help relieve early morning stiffness, 2 tablets at bedtime.
Available: Bottles of 12, 36 and 60 tablets.



Final Report

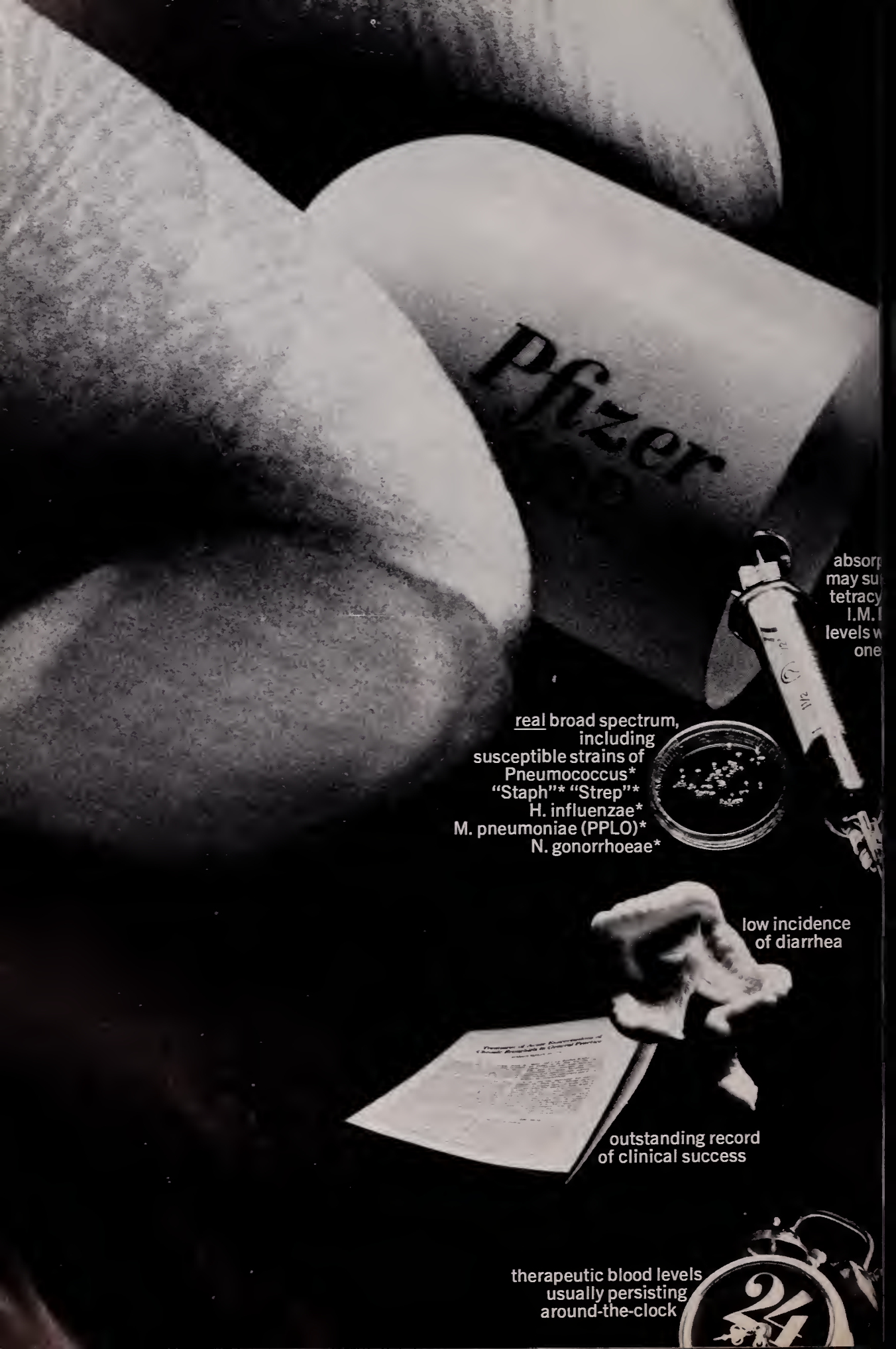
This is my last letter to you. I will report more fully to you at our annual meeting in the next few days. I want to talk to you briefly about your Florida Medical Association. I quite recognize that medical society activities (both county and state and AMA) can be boresome—certainly cumbersome, but as I have gone through this year I have realized more and more that these activities in organized medicine have a very important place in our lives and don't doubt it for one minute. When you are in the midst of activity dealing with all sorts of people, mostly very intelligent, you get a sense of excitement because, as the young people say, "This is where the action is." Feeding into the FMA and the county society channels is a tremendous wealth of valuable information. The problem is how to get it to you. I wish we could simply give it to you by telepathy but we cannot.

Up until about 1946 the FMA presidency was in many ways an honorary position given for deserving recognition. Since then, the FMA has not been able to afford this luxury and your President has been useful as a coordinating influence, hopefully because he has a broad view of the entire operation. He is chairman of the six-man Executive Committee and the 14-man Board of Governors, and as such wields a strong influence. Our main job is to carry out the dictates of the FMA House of Delegates as laid out at our annual meetings. Sometimes to carry out these dictates is a real job! Working for the FMA on the state level are nine main councils, about 100 committees, and an executive office with a number of employees. Our expenses last year were $397,423, of which $25,000 came out of reserves. Our budget for 1970 is $505,000. We increased our dues last year to accommodate these changes. The net result of this massive, cumbersome, and democratic mechanism is that the President has a most demanding job in being as sure as possible that everything is functioning properly. No one person can wrap himself around all this. Harold Parham comes as close to it as anybody as Executive Vice President, but with 6,800 M.D.'s in our organization this gets more and more difficult, and I insisted that we broaden the administrative staff so that we can be sure that we are not dependent on one man to know everything.

In general, our strength lies in the fact that we present group positions, group actions, coordinating influences that no other organization can possibly do. The specialty societies and even the county societies cannot do this because they do not represent quite a broad enough scope. As a corollary to this group action, it is imperative that our committee form of doing organizational work functions well, and I can report that it does. Over the years we have developed and are developing many, many dedicated men who have become real experts in their areas of interest, and this in addition to being competent physicians in their chosen field of medicine; and because of this they carry real impact among ourselves and certainly with other medical groups and in government, industry and labor. And if you don't believe that committee actions are important, see how the state and federal governments work. See what the Senate Finance Committee is doing to the medical profession.

Our FMA is a centralized agency for information-gathering, study, debate, and finally action on any important subject. We must represent all segments—private practice, specialty practice, public health, governmental medicine, medical schools, industry, and many other segments. You would be surprised to know how many influential people and groups turn to organized medicine with their problems. Sometimes their motives are questionable, but nevertheless they turn—and we must act or react correctly, and with excellent information. If there were no organized medicine on a broad base, we would not have the influence we now have, as little as that may seem to you, and our influence depends on our committee work, done by intelligent, deeply knowledgeable doctors, working quietly —especially as long as the efforts are coordinated and represent the best interest of the majority of our doctors and the public good.

Henry J. Baberg Jr.


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one
real broad spectrum,
including
susceptible strains of
Pneumococcus*
"Staph"* "Strep"*
H. influenzae*
M. pneumoniae (PPLO)*
N. gonorrhoeae*
low incidence
of diarrhea
outstanding record
of clinical success
therapeutic blood levels
usually persisting
around-the-clock
24



The effectiveness you need.
The advantages you look for.

Vibramycin® (doxycycline)

a semi-synthetic tetracycline

*Because not all strains of pathogens are susceptible, it is recommended that routine culture and susceptibility studies be performed. When using Vibramycin (doxycycline) in streptococcal infections, therapy should be continued for 10 days to prevent the development of rheumatic fever or glomerulonephritis.

See Brief Summary on next page for information on side effects and contraindications.

Pfizer LABORATORIES DIVISION
New York, N.Y. 10017





and convenience too.

The unique new Vibramycin (doxycycline) V-Pak is especially convenient for use both in your office practice and in the hospital outpatient department. It contains a typical four-day course of therapy for routine infections with easy-to-understand pat instructions. The dosage is low, just 100 mg. b.i.d. the first da followed by 100 mg. once a day for the next three days. In more severe infections, 100 mg. q.12 h. is recommended. If renal impairment exists, lower than usual doses are indicated.

And for added convenience in the hospital pharmacy, Vibramycin is available in unit-dose packs of 100 (10 x 10's) for both the 100 mg. and the 50 mg. capsules.

VIBRAMYCIN® (doxycycline)
BRIEF SUMMARY

Contraindicated: In individuals who have shown hypersensitivity to doxycycline.

Warnings: The usual dosage and frequency of administration of Vibramycin (doxycycline) differs from those of other tetracyclines. Exceeding the recommended dosage may result in an increased incidence of side effects.

If renal impairment exists, even usual doses may lead to excessive accumulation of the drug and possible hepatic toxicity. For such patients, lower than usual doses are indicated and, if treatment is prolonged, Vibramycin serum level determinations may be advisable.

Vibramycin, like other tetracyclines, may form a stable calcium complex in any bone-forming tissue, although *in vitro* Vibramycin binds calcium less strongly than other tetracyclines. The use of Vibramycin during tooth development (last trimester of pregnancy, neonatal period, and early childhood) may cause discoloration of the teeth (yellow-gray-brownish). This effect may occur mostly during long-term use, but also may occur with short-treatment courses.

Increased intracranial pressure with bulging fontanelles has been observed in infants receiving tetracyclines. This effect has disappeared rapidly on cessation of therapy with no sequelae.

In certain hypersensitive individuals treated with Vibramycin, exposure to direct sunlight may precipitate a photodynamic reaction. In individuals with a history of photoallergic reactions to tetracyclines, exposure to direct sunlight should be avoided and treatment should be discontinued at first evidence of skin discomfort.

Precautions: As with any antibiotic, overgrowth of nonsusceptible organisms may occasionally occur. Constant observation of the patient is essential. If such superinfections are encountered, Vibramycin should be discontinued and replaced by appropriate therapy.

When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including dark-field examinations, should be utilized. In all cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months.

Adverse Reactions: Nausea, vomiting, diarrhea, vaginitis, as well as reactions of an allergic nature such as dermatitis, urticaria, and anaphylaxis may occur but are rare. Glossitis, stomatitis, proctitis, onycholysis and discoloration of the nails may rarely occur during tetracycline therapy as with other antibiotics. If severe adverse reactions, individual idiosyncrasy, or allergy occur, discontinue medication.

As with other tetracyclines, elevation of SGOT or SGPT values, or elevated BUN have been reported, the significance of which is not known at this time. Anemia, neutropenia, and eosinophilia have been reported, as with other tetracyclines.

Animal Pharmacology: As with other tetracyclines, at doses greater than those recommended for human usage, Vibramycin produces discoloration of animal thyroid glands. Careful monitoring of animals and humans has disclosed no abnormalities of thyroid function studies. Also, as with other tetracyclines, at relatively high oral doses, evidence of hepatotoxicity has been noted in dogs and signs of gastrointestinal intolerance have been seen in both dogs and monkeys.

Dosage: The usual dose of Vibramycin is 200 mg. on the first day of treatment (administered 100 mg. every 12 hours) followed by a maintenance dose of 100 mg./day. The maintenance dose may be administered as a single dose, or as 50 mg. every 12 hours. In the management of more severe infections (particularly chronic infections of the urinary tract), 100 mg. every 12 hours is recommended. The recommended dosage schedule for children weighing 100 pounds or less is 2 mg./lb. of body weight divided into two doses on the first day of treatment, followed by 1 mg./lb. of body weight given as a single daily dose or divided i doses, on subsequent days. For more s infections up to 2 mg./lb. of body weig be used. For children over 100 lbs. the adult dose should be used.

Acute gonococcal anterior urethritis in —a single dose of 300 mg. or 100 mg. b for 2-4 days.

Acute gonococcal infections in the adul should be treated with doses of 100 mg until cure is effected.

Therapy should be continued beyond th that symptoms and fever have subsidec When used in streptococcal infections, should be continued for 10 days to prev the development of rheumatic fever or glomerulonephritis.

If gastric irritation occurs, it is recomm that Vibramycin be given with food or m Studies indicate that the absorption of Vibramycin is not markedly influenced simultaneous ingestion of food or milk.

Simultaneous administration of alumin droxide gel given with tetracycline antib including Vibramycin has been shown t crease absorption.

Supply: Vibramycin Hyclate (doxycyclin hyclate) is available as capsules contai doxycycline hyclate equivalent to 50 mg doxycycline, bottles of 50, unit-dose pac 100 (10 x 10's), and X pack of 50 (5 x 10 capsules containing doxycycline hyclat equivalent to 100 mg. of doxycycline, bottles of 50, unit-dose pack of 100 (10 and V pack of 25 (5 x 5's).

Vibramycin Monohydrate (doxycycline hydrate) is available as a dry powder fo suspension containing when reconstitu doxycycline monohydrate equivalent to of doxycycline per 5 cc. (each teaspoon with a pleasant-tasting raspberry flavor, bottles.

More detailed professional information available on request.

Pfizer LABORATORIES DIVISION
New York, N.Y. 10017

Vibramycin® (doxycycline)

a semi-synthetic tetracycline

for the debilitated geriatric patient



Berocca®

TABLETS
high potency B-complex and C for nutritional support

AVAILABLE ONLY ON Rx

contains water-soluble vitamins only

b.i.d. dosage

good patient acceptance

no odor, and virtually no aftertaste

Each Berocca Tablet contains:

Thiamine mononitrate	15 mg
Riboflavin	15 mg
Pyridoxine HCl	5 mg
Niacinamide	100 mg
Calcium pantothenate	20 mg
Cyanocobalamin	5 mcg
Folic acid	0.5 mg
Ascorbic acid	500 mg

Usual dosage is one tablet b.i.d.

Indications: Nutritional supplementation in conditions in which water-soluble vitamins are required prophylactically or therapeutically.

Warning: Not intended for treatment of pernicious anemia or other primary or secondary anemias. Neurologic involvement may develop or progress, despite temporary remission of anemia, in patients with pernicious anemia who receive more than 0.1 mg of folic acid per day and who are inadequately treated with vitamin B_{12}.

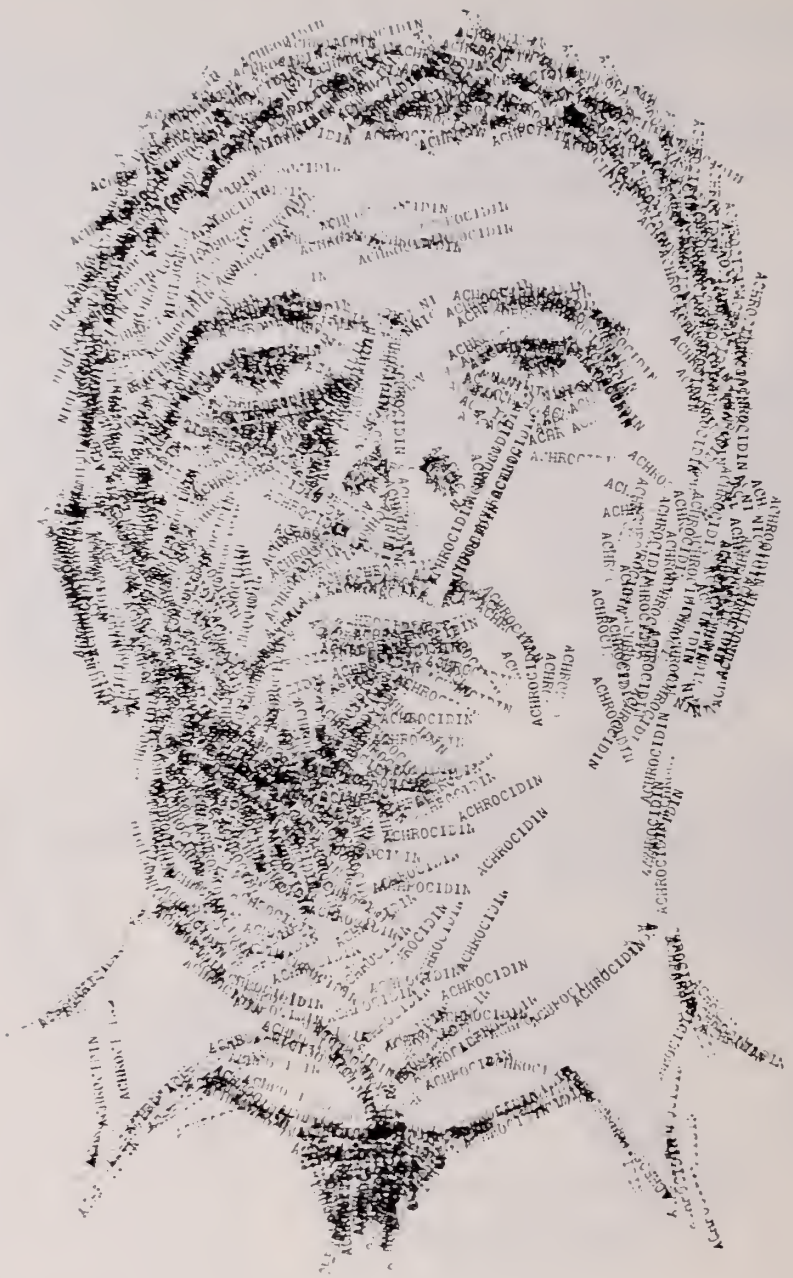
Dosage: 1 or 2 tablets daily, as indicated by clinical need.

Available: In bottles of 100.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



Achrocidin® Tablets and Syrup

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

ACHROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatme of tetracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of t upper respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elder patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN Tetracycline equivalent Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 m

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliati dermatitis; photosensitivity; onycholysis, n discoloration. *Kidney*—dose-related rise BUN. *Hypersensitivity reactions*—urticar angioneurotic edema, anaphylaxis. *Intracran* —bulging fontanels in young infants. *Teeth* yellow-brown staining; enamel hypoplasi *Blood*—anemia, thrombocytopenic purpur neutropenia, eosinophilia. *Liver*—cholestasis high dosage.

Upon adverse reaction, stop medication a treat appropriately.

NEW...

SUSTAINED-RELEASE VITAMIN C



CEVI-BID

500 mg. capsules maintain optimal levels around-the-clock on b.i.d. dosage

When Vitamin C is taken in ordinary tablet form, the rise in blood levels is rapid, but Vitamin C is as rapidly excreted and blood levels drop accordingly.

In CEVI-BID, medication is released at a smooth, continuous, predictable rate dependent only upon the presence of fluid in the G.I. tract and independent of pH or other variables.

CEVI-BID maintains optimal blood levels of Vitamin C, and avoids "peak and valley" effects of ordinary Vitamin C tablets.

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Milk-free, hypo-allergenic Soyalac has a pleasing taste that is eagerly accepted by most infants. It's similar to mother's milk in composition and assimilation, much like cow's milk in consistency and completely free of fibre. Extensive clinical data support Soyalac's value in promoting growth and development. Soyalac is also excellent for growing children and adults.



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Concentrated Liquid or Powdered

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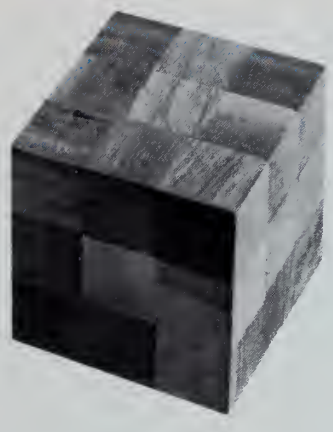
IN G.U. THERAPY

Does not create problems...



SOLVES THEM

WITH FIRST DOSE PAIN RELIEF



Urised is a problem solver through its time tested record of minimal side effects. Unlike newer antibiotics or sulfonamides, Urised does not create problems. It brings patient comfort with first dose pain relief. For over 50 years, Urised has created physician and patient confidence by providing effective therapy when needed.

Clinically effective for G.U. Therapy[1-5]

URISED®

For G.U. Frequency–Urgency–Burning

- **CYSTITIS**
- **PYELITIS**
- **TRIGONITIS**
- **URETHRITIS**

Each blue-coated tablet contains active:

Atropine Sulfate	0.03 mg.	Methylene Blue	5.4 mg.
Hyoscyamine	0.03 mg.	Phenyl Salicylate	18.1 mg.
Methenamine	40.8 mg.	Benzoic Acid	4.5 mg.

Caution: Federal law prohibits dispensing without a prescription.

Action and Uses: Urised is effective in cystitis, pyelitis, trigonitis in pregnancy, urethritis, and other urinary tract infections where the invading organisms, such as E. coli, S. aureus and albus, are susceptible to methenamine and methylene blue in an acid medium.

URISED also is useful as a prophylactic measure prior to urinary tract instrumentation or operation. In acute fulminating infections, URISED may be used for symptomatic relief while awaiting specific laboratory diagnosis. May be combined with specific therapy where indicated.

Effects: Rapid relief of pain, relaxation of smooth muscle spasm through parasympatholytic action of atropine and hyoscyamine; pus cell content decreased.

Administration and Dosage:

Adults: Two tablets, orally, four times per day, followed by liberal fluid intake.

Children: One-half the adult dose.

Acute cases: Initially two tablets every hour for three doses, followed by the recommended daily administration.

Precautions: Administer with caution to persons with known idiosyncrasy to atropine and cardiac disease. While under this therapy the urine is blue; patients should be so advised to allay apprehension.

Side Effects: Neither irritation nor untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occurs, decrease dosage. If rapid pulse, dizziness or blurring of vision occurs, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

Contraindications: Glaucoma, urinary bladder neck or pyloric obstruction, duodenal obstruction and cardiospasm. Hypersensitivity to any of the ingredients.

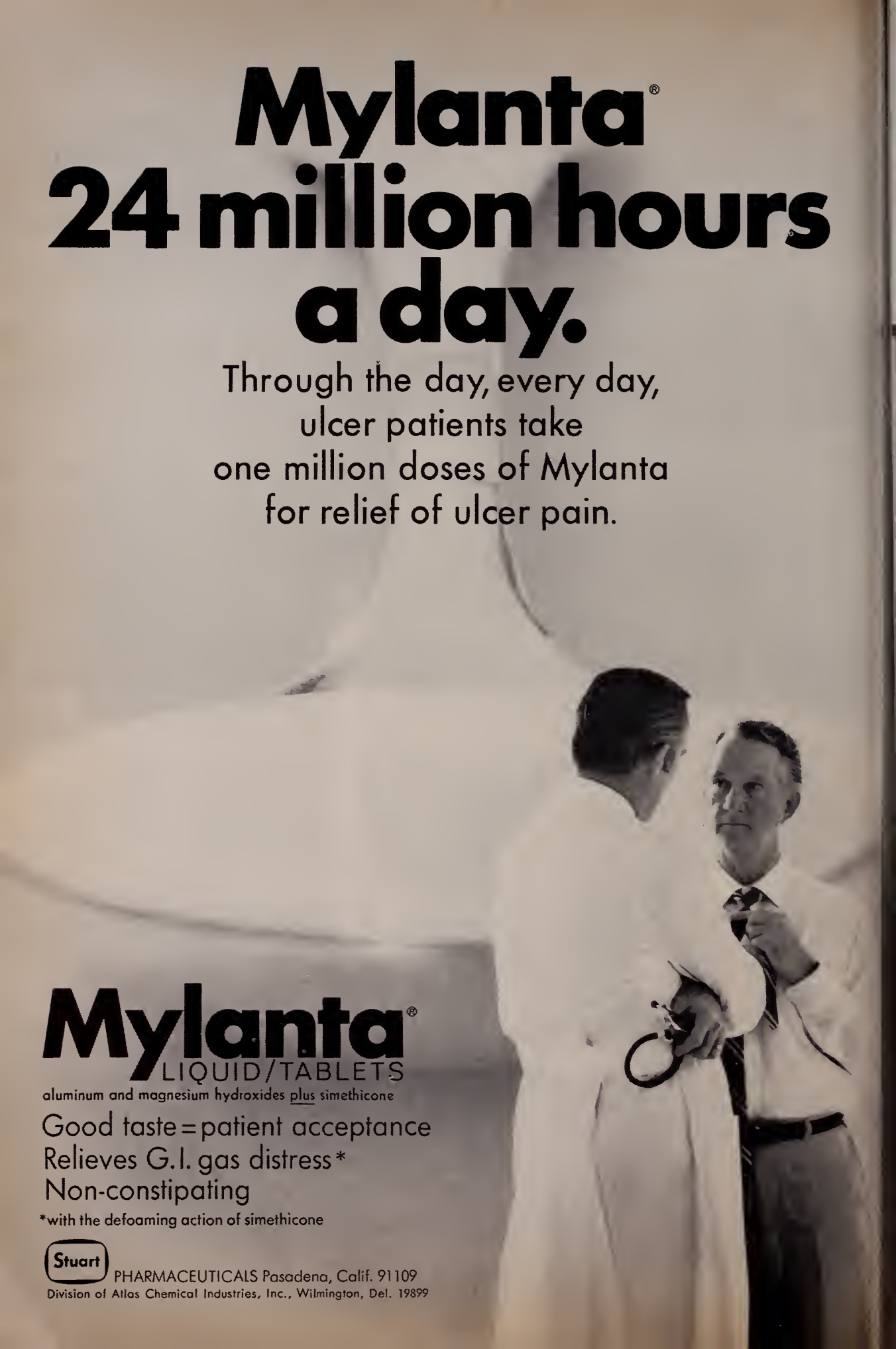
How Supplied: Bottles of 100, 500 and 1,000 tablets.

References: (1) Sands, R. X.: New York St. J. Med. 61:2598-2602, 1961; (2) Renner, M. J., et al.: Hosp. Topics 39:71-73, 1961; (3) Haas, Jr., J., and Kay, L. L.: Southwest. Med. 42:30-32, 1961; (4) Marshall, W.: Clin. Med. 7:499-502, 1960; (5) Strauss, B.: Clin. Med. 4:307-310, 1957.

CONAL Manufacturers of Uriceutical® Specialties
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Mylanta®
24 million hours a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.



Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

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Division of Atlas Chemical Industries, Inc., Wilmington, Del. 19899

I love my family.
I adore this house.
My in-laws are great.
The neighbors are wonderful.



ndications. For use in management of anxiety and ension occurring alone or as accompanying ymptom complex to medical and surgical disorders nd procedures. Though not a hypnotic, fosters ormal sleep through antianxiety and related uscle-relaxant properties.

'ontraindications. History of sensitivity to ieprobamate.

mportant Precautions. Carefully supervise dose nd amounts prescribed, especially for patients rone to overdose themselves. Excessive prolonged se has been reported to result in dependence or abituation in susceptible persons, as alcoholics, x-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage radually to avoid possibly severe withdrawal eactions. Abrupt discontinuance of excessive loses has sometimes resulted in epileptiform eizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and mpairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs, if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient, f persistent and associated with ataxia, usually esponds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

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Tumor of the Neck Caused by Cervical Rib

George Kleinfeld, M.D. and Richard M. Fleming, M.D.

Congenital supernumerary ribs may be found in both the lumbar and cervical spine but are usually considered clinically important only when a seventh cervical rib compresses the neurovascular structures lying between it and the overlying scalene musculature, the so-called scalenus anticus syndrome. References and descriptions of the nature and the therapy of the scalenus anticus syndrome are numerous in the international medical literature and are to be found in standard texts.

It is our purpose here to emphasize another feature of the seventh cervical rib which is also of clinical significance.

Case Reports

Case 1.—A 71-year-old male was found to have a hard, deeply fixed mass in the right supraclavicular region (Fig. 1a). Routine chest x-ray was interpreted to be normal. The patient was referred to a surgeon for biopsy of the mass with a presumptive diagnosis of metastatic carcinoma. Prior to biopsy an x-ray of the neck revealed a right cervical rib (Fig. 1b) and biopsy was not advised. Despite his advanced age, this patient had no knowledge of a cervical rib.

Case 2.—A healthy 15-year-old schoolgirl was found to have a hard, deeply fixed mass in the left lateral neck (Fig. 2a). Lymphoma was suspected. The chest film was normal but x-rays of the neck disclosed a left cervical rib as well as malformation of two cervical vertebrae (Fig. 2b). Biopsy was not performed.

Case 3.—A 41-year-old female was found to have a firm irregular mass in the right breast. A hard mass was also found in the right supraclavicular region. The initial clinical impression was that this represented an inoperable carcinoma of the breast; however, the patient knew of her cervical rib and so advised the surgeon. She subsequently underwent excision of the tumor of the breast which proved to be benign.

Drs. Kleinfeld and Fleming are clinical instructors of surgery at the University of Miami School of Medicine, Miami.



Figure 1a

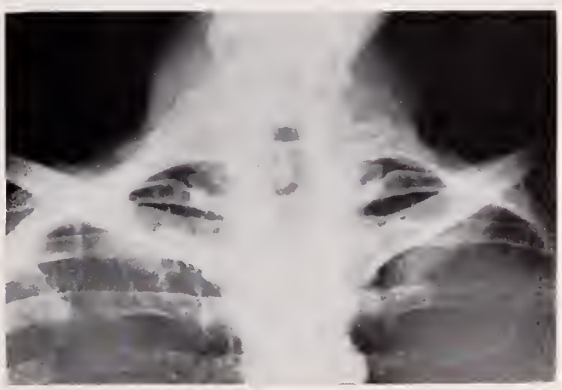


Figure 1b



Figure 2a

Discussion

When of sufficient size, seventh cervical ribs produce a hard mass in the supraclavicular region, either in the scalene triangle or in the posterior cervical triangle depending on length. The consistency of the overlying structures, i.e., nerves, blood vessels, muscles, may modify the bony hardness of the rib, impart a confusing configuration to the mass and exaggerate its size. As illustrated by our cases, an examiner not considering a cervical rib in his diagnosis of a lower cervical mass may believe that a primary or metastatic neoplasm is present. The diagnostic problem may be made more difficult by the occasional failure of cervical ribs to appear on routine chest x-rays. Cervical spine views may be required. Biopsy may be considered and perhaps mistakenly undertaken in some patients, although not in ours. In case 3, if the breast mass had been malignant and



Figure 2b

the patient and examiner had not realized the significance of her cervical rib, treatment of the breast carcinoma might have been radically altered.

Summary

Seventh cervical ribs may mimic neoplasms of the supraclavicular region and should be considered in the differential diagnosis of masses in this region.

▶ Dr. Kleinfeld, 995 North Miami Beach Boulevard, North Miami Beach 33162.

Airboats and Injuries

William C. Allen, M.D.

Airboating, a popular sport ever since it began in Florida in the late 1920's, is attracting more and more people who either buy a commercially made boat or make their own so they can reach the back swamp country. The medical significance of this trend is that more and more injuries are directly attributable to airboats, their construction, and operation. In the past two years victims of four accidents caused by propellers of airboats have been seen at Shands Teaching Hospital of the University of Florida College of Medicine. One of the victims arrived DOA in the emergency room.

Airboats

Historically, the originator of the airboat is reportedly Herbert Richmond of Miami, who, in 1924, called his craft the "aboveboard." He used twin canoes hitched together, fitted with a Harley-Davidson motorcycle engine. This type craft was later used by hotel owners close to the Everglades to transport their guests back into the Everglades where, until that time, conventional boats could not negotiate the shallow waters. Frog hunters began using the boats to get in and out of the swamps. In the transition, the froggers adopted automobile motors and still later, the Redding boys, Joxie and Bunk, switched to light aircraft engines, particularly Continentals, Franklins and Lycomings. By this time the evolutionary process of the airboat was well underway and, indeed today, some are made in the same design as those back in the late 1920's and early 1930's.

Airboats are motor-driven boats which use a propeller to push wind, much like an airplane, translating this power then to the boat itself. This allows a boat to run in very shallow water as there are no encumbrances on the bottom side. Since the boats have a flat bottom with no rudder in the water, steering is accomplished by a rudder behind the propeller. Some commercial and homemade boats are capable of moving on dry land with the amount of power in their engines. This enables their pilots to go from lake to lake, over dikes, roads, and has been a tremendous boon to sportsmen as the boats have made even the farthest reaches of the deep swamps accessible.

The boats attract more than just the ordinary sportsman. They are spectacular to see in operation and even more spectacular and thrilling to ride. Because of their unique characteristics, the boats are sometimes referred to as swamp boats or blow boats.

An increasing number of people are involved in airboating; similarly a large group are unaware of the inherent dangers in a propeller-driven boat. Its operation and use are quite different from conventional outboards or inboards.

Airboats, both commercial and homemade, are capable of speeds in excess of 60 or 65 m.p.h. The operator sits high so that he can see over the grass that the airboat runs through. The boat is made of aluminum, steel or fiberglass and has a very shallow draft, creating a situation in which the person who has never driven airboats feels quite ill at ease. Because of the flat bottom hull, the boat will easily flip sideways when put into a tight spin. If it hits its own wake or a log, it will easily turn over. As an airboat planes along at high speeds, it usually rides over submerged logs or rocks; however, if the operator misjudges grass or mud and hits a sandbar, the boat will suddenly stop, pitching him forward. Again, unlike other boats, there is no reverse and the operator must become accustomed to using the rudder behind the propeller blade. If an airboat operator feels that he is in trouble and during a turn suddenly decreases his throttle, he will surely swamp the boat and sink.

Because of the power, it is quite conceivable that an airboat going at top speed and planing across grass and water can become airborne, whereupon the operator may lose control of the boat, tipping it over.

From the Division of Orthopaedic Surgery, Department of Surgery, University of Florida College of Medicine, Gainesville.

These, in brief, are some of the common operational difficulties inherent in all airboats.

At the present time most airboat operators enjoy the sport as a week-end hobby, building and remodeling their own boats. It is conceivable that a person can buy an old used airplane engine for as little as $100. A flat-bottomed boat which the person can make himself or buy second-hand may cost as much as another $50 to $100. All in all, a person can build an airboat for as little as $200 to $300 if he is at all mechanically inclined. These people enjoy airboating both as a hobby and a method of getting out of doors into the areas of wilderness they are interested in. The boats are usually made to function strictly as a unique mode of transportation with little consideration for safety. When one of these turns over or when someone gets too close to the propeller, severe injuries may occur.

Case Studies

The following case studies are of people who were involved in airboat accidents. Preceding each is a brief history of what happened in those few moments prior to the accident.

Case 1.—The first case involved a 33-year-old married white male. The patient, while trying to crank an airboat engine, suffered a propeller injury to his right shoulder girdle, right posterior superior chest, and cervical thoracic spine. Apparently in cranking the engine manually, his two hands on the propeller, the engine caught and started. He fell forward with the sudden release of the propeller. The propeller blade struck him across the top of the shoulder entering the cervical spine and chest. He was rushed to the emergency room where no blood pressure was obtainable. He received volume replacement with Ringer's lactate and blood and presently had a systolic blood pressure of around 80 with a pulse of 150. He was alert at that time. There was no motor or sensory deficit in his extremities. He had a good radial pulse in the right upper extremity although transient paresthesias in his left thumb and index finger had been noted shortly after the accident. These resolved and have not recurred. Sensation to pinprick was intact to all points in his extremities.

There was a large, deep laceration over the right posterior shoulder girdle extending to just past the midline to the left. There were multiple fracture fragments of the distal clavicle, proximal humerus, glenoid, and scapular spine and the supraspinatus portions of the scapula. The spinous processes of the upper thoracic and lower cervical vertebrae were palpable in the depths of the wound and there was a definite tear of the interspinous ligament at the level of C-7, T-1, but no instability of the spine was detectable. There were extensive superficial and deep second degree burns over both shoulders and over his back.

The patient was admitted directly to the intensive care unit where he received six units of blood. There was no evidence of pneumothorax and x-ray of the shoulder showed the injuries as described. He was then taken to the operating room where the shoulder wound was thoroughly debrided of loose bony fragments which included the acromion and spine of the scapula as well as the distal third of the clavicle. He received 11 units of blood during surgery and maintained a good urine output throughout his course. He was immobilized in a modified sling and swath with a large amount of mechanic waste in the right axilla to hold his arm at approximately 25° of abduction. His cervical spine was immobilized in a soft felt collar. He was later placed in an abduction type plaster spica and he did well post injury.

Case 2.—A young married woman in her middle 20's was injured while enjoying a weekend afternoon with her husband on their airboat off Cedar Key. They were approximately three to four miles off shore when the boat, piloted by her husband, went into a sharp bank, slid sideways, catching its leading edge and flipped onto her. The motor continued to run with the propeller thrashing about. She sustained traumatic amputations of both legs below the knees and amputation of the hand except for the hypothenar eminence and little finger. Since they were alone, he could get her to shore only with his own boat. In a panic, he was able to right the boat, get his wife aboard, start the motor and return to shore where he left the boat, carried his wife to the car and drove to the emergency room at the University of Florida. She subsequently underwent emergency therapy with replacement of blood loss, debridement of wounds with amputation of both legs and a hand. Being young and well motivated, she has learned to use bilateral below knee prostheses and uses her left hand with her little finger functioning as a hook.

Case 3.—The third patient was a 50-year-old man who was a guest aboard another man's airboat. While in a remote area of the swamp close to Gulf Hammock, the airboat became stuck in the mud. They both got out, started the motor, and began pushing the boat from behind the propeller. The man slipped or lost his balance, and both hands were cut off by the propeller. He now wears a prosthetic hook on one arm and uses his other arm, which has an intact wrist joint with carpus, without a prosthesis. This hand has no thumb or fingers. He is a white collar worker and is able to perform well at his occupation.

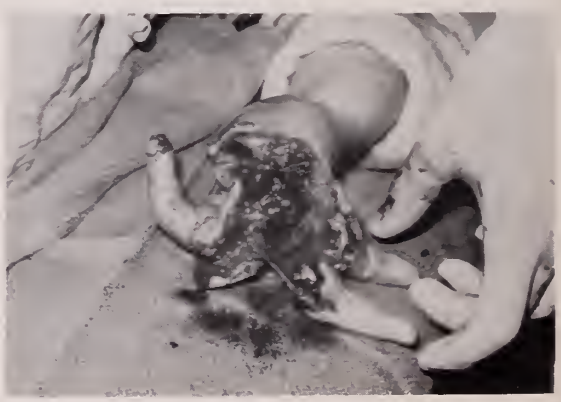


Fig. 1.—(Case 2) A 26-year-old married woman received this mutilating injury to her hand. Subsequently, she retained her little finger and hypothenar eminence. See Figure 3.



Fig. 2.—(Case 2) These injuries occurred in the same patient shown in Figure 1 and necessitated bilateral below knee amputations.



Fig. 3—Case 3) A propeller injury to a man's right hand sustained when he slipped while pushing an airboat. See Figure 4.



Fig. 4—(Case 3) The man's opposite hand seen in Figure 3.

Discussion

In all these cases, the patients were hit by the propeller. There is a wide divergence of opinion among various people associated with airboats as to whether or not a propeller should be shrouded with a protective cage as a safety device. One commercial manufacturer of airboats in Florida believes very strongly that the propeller should be covered so that it is practically impossible for a person to stumble and fall or in any way get his extremities or head into the path of the propeller. He has not always felt this way and, indeed, for some years manufactured airboats without any type of protective covering. About eight years ago he was starting an airboat by manually pushing on the propeller and became the victim of an accident. The propeller struck the dorsum of his hand, severing the extensor tendons and breaking the metacarpals, leaving the flexor tendons and digital nerves and arteries intact. At the time, he thought he had lost his hand; however, it was replaced and the extensor tendons reconstituted at surgery. Today he has, for all practical purposes, a normal hand. Following this accident, he decided not to sell airboats that would allow people to cut off their extremities by such a simple accident. He subsequently designed and developed a protective cage for the propeller. At the present time, this man sells many airboats to federal and state agencies and all have a protective guard around the propeller. The Army Corps of Engineers, which uses several airboats throughout Florida for the spraying of hyacinths, also insists that the propeller be well shrouded. These boats are frequently handmade by the men involved in the operation and come well protected, probably as well as any airboat can be, so that propeller accidents will not occur.

Opposing this viewpoint is a large group of people who believe a protective cage around a propeller results in more air drag and less power from the engine. This is a false argument. The airboat's maximum speed is somewhere in the neighborhood of 60 to 65 m.p.h. Even at that speed the propeller is running in its own turbu-



Fig. 5—An unsafe airboat which is in use by a commercial frogger.



Fig. 6—A safe airboat with a well caged propeller in use by the Army Corps of Engineers.

lence and the added turbulence of air from the protective cage means very little. Another problem frequently voiced by airboat operators is lily pad leaves. Running at high speeds through lily pads, some of the leaves will come off and plaster themselves against the cage, effectively cutting down the amount of air for the propeller, thereby reducing the speed of the boat. This is a valid argument in that if the leaves are able to screen off enough of the air to the propeller, the boat will be effectively slowed. This is a minor argument because it only takes a matter of seconds to stop the boat and clean off the leaves. If the cage is to be truly a protective device, it has to fit up over the top of the propeller. The added height to the boat is another eight to 12 inches which seems to annoy some operators as it is sometimes difficult for them to get under bridges and low-hanging branches. The safety factor of a well protected propeller outweighs these minor disadvantages.

It is my opinion that if airboat operators were educated and informed of the danger of the unshrouded propeller and the unique construction of the boat, the number of injuries would be decreased.

Summary

Airboat accidents are usually of a mutilating nature, almost always involving people getting caught in the propeller.

To decrease the number of injuries incurred in airboating, two factors should be employed: a proper protective shroud for the propeller should be used at all times when the propeller is in motion; proper education and familiarization with the operation of the airboat should be a prerequisite for people riding in or using airboats.

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Inborn Errors of Metabolism Associated With Unusual Odors

Donald G. Carpenter, M.S. and Charles H. Carter, M.D.

More than 190 clinical entities involving either enzyme deficiencies or transport defects have been described[1] and the number is increasing rapidly. Permanent brain damage and mental retardation develop with most of these syndromes unless they are discovered and treatment begun when the patient is young. Fortunately many are treatable[2] and screening tests have been developed for detection of a large number.[3–5] Except for phenylketonuria, these tests are not yet generally available in most clinical laboratories.

A number of metabolic errors are associated with unusual odors due to accumulation of certain metabolites in body fluids which produce characteristic aromas.[6] These odors are usually quite striking and obvious to nursing personnel and the attending physician. They may lead to early detection of these conditions, subsequent confirmation and treatment which could save these patients from irretrievable mental retardation and a life of institutionalization.

Although incidence of most of these syndromes is small, and in some only one or two cases have been found, they should be suspected in any patient exhibiting an unusual odor. Following is a brief review of currently known metabolic errors associated with unusual odors.

Maple-Syrup-Urine Disease

Maple-syrup-urine disease was described by Menkes et al[7] in 1954 and subsequently identified as a disorder of the branch-chained amino acids, leucine-isoleucine and valine. The defect was defined as a block in oxidative decarboxylation of the keto acids formed in the first step of their catabolism.[8–10] A build-up of both the amino and keto acids occurs in the tissues, plasma, cerebrospinal fluid and urine and the presence of α-ketoisocaproic, α-keto B-methyl valeric and α-ketoisovaleric acids in the urine may be responsible for the odor described by various workers as resembling "caramelized sugar," "maple sugar" or as "malty."

Anorexia, feeding problems and failure to thrive, hypertonicity, occasional convulsions and semi-coma appear in the first week of life. Both sexes and virtually all races may be affected. The outcome is uniformly fatal unless diagnosed and treated in the first few days of life.

Treatment consists of dietary management to correct high serum levels of leucine, isoleucine and valine.[8] There is ample evidence that the institution of early treatment can prevent or alleviate the severe central nervous system deterioration associated with this disease. A discussion of a leucine-isoleucine-valine poor regimen may be found in studies by Goodman et al[8] and Synderman et al.[9]

Several methods of detection are available. The unusual odor is the most obvious. The unidimensional paper chromatographic screening procedure of Efron[3] and the 2.4 dinitrophenylhydrazine test for α-keto acids[5] should give positive results on urine specimens. Quantitative amino acid studies should be used to substantiate the diagnosis. Confirmation of the enzyme defect can be made from in vitro studies of cultured peripheral leukocytes.

Inheritance is by autosomal recessive means.

Intermittent Branch-Chained Ketonuria

Whether this syndrome[11-13] is a separate entity or a variant of maple-syrup-urine disease is not clear. It is similarly characterized by a block in oxidation decarboxylation of the keto acid derivatives of leucine-isoleucine and valine, but is intermittent in character. The patients are usually healthy in the neonatal period and develop normally for a period of several months to several years before the onset of the acute phase. This is reportedly triggered by increased protein loads because of diet change, as a result of the catabolic phase associated with infection or occasionally by

From Sunland Hospital at Orlando, Orlando.

an indiscernible cause.

During the acute episode, the branch-chained keto acids appear in the urine and the typical "maple syrup" odor appears accompanied by lethargy, semi-coma, fever and sometimes death. The administration of fluids and modification of the diet to reduce protein intake are the recommended treatments. Permanent neurological damage is apparently not seen.

Detection can be made by the same means as for maple-syrup-urine disease.

Inheritance is probably by autosomal recessive transmission.

Methionine Malabsorption Syndrome

Hooft and colleagues[14] reported this syndrome in 1964 in a 2-year-old, white-haired, blue-eyed Belgian girl with diarrhea, convulsions, abnormal EEG, polypnea, and a characteristic sweet smell. Biochemical studies showed intestinal malabsorption of methionine due to a defect in the normal transport mechanism of this amino acid. The unabsorbed methionine was reportedly metabolized by microflora of the colon, producing α-hydroxybutyric, α-ketobutyric and α-aminobutyric acids which are partially absorbed and excreted in the urine.[15]

Administration of a methionine-poor diet for 12 months resulted in return to normal of the EEG, and disappearance of diarrhea and convulsions. After this time a diet without excess methionine was substituted. Her hair became much darker, she was clinically normal and somewhat improved mentally.

The peculiar odor caused by excess urinary and fecal α-hydroxybutyric acid, convulsions and diarrhea should alert the physician to the possibility of this syndrome. Confirmation can be made by chromatography of urine organic acids for excessive amounts of α-hydroxybutyric acid.[16] Normal levels of α-keto and amino acids are reported.

The genetics of this disease have not been studied.

Oasthouse Disease

In 1958 Smith and Strang[16] reported a case almost identical clinically to the methionine malabsorption syndrome, but with an earlier onset. The urine also exhibited a peculiar burnt sugar odor and showed a hyperaminoaciduria with elevated levels of phenylalanine, phenylpyruvic acid, indolelactic acid and α-hydroxybutric acid. It was considered to be an error involving the metabolism of phenylalanine and tryptophan.

Confirmation of the clinical impression can be made by chromatography of urine organic acids.[16] The genetics are unknown.

Odor of Sweaty Feet Syndrome

This disease was described by Sidbury and co-workers[17] in two families in whom newborns presented a peculiar odor of "sweaty feet" or a "locker room", lethargy, severe acidosis, dehydration, convulsions, terminal sepsis and bone-marrow depression. The clinical course began shortly after birth, with death ensuing during the first month of life.

Excessive amounts of butyric acid and hexanoic acids were found in blood, urine and exhaled air. It was postulated by the authors that this disease represented a deficiency of green acyl dehydroginase activity, an enzyme responsible for the second in a series of steps in the beta oxidation of C_2, C_4 and C_6 fatty acids to carbon dioxide and water.

Genetic studies indicated autosomal recessive transmission.

Since all the newborns died at an early age, no treatment has been described.

Confirmation of clinical findings can be made by detection of high levels of butyric and hexanoic acids in the urine by gas chromatography.

Isovaleric Acidemia

Another syndrome characterized by an odor of "sweaty feet" or "cheesy" smell described by Tanaka et al[18] was found in two siblings with nonspecific mottling of the fundus of the eyes and retinal vessel tortuosity. The patients experienced recurring bouts of vomiting, metabolic acidosis and either stupor or coma precipitated by protein ingestion or recurrent infections. During these episodes, increased quantities of isovaleric acid were found. Subsequent reports showed increases also in N-isovaleryl glycine and B-hydroxyisovaleric acid.[19] Leucine and protein loading studies indicated a probable deficiency of isovaleryl-Co A dehydrogenase activity, blocking the normal catabolism of isovaleric acid.

Treatment consisted of intravenous glucose therapy during the acute phase and a low-protein diet (1.2-1.5 Gm./day). On this regimen, these patients showed only slight psychomotor retardation.

Inheritance appears to be autosomal recessive. Detection is made by identification of increased

amounts of isovaleric acid in urine by gas chromatography.

Phenylketonuria

A wealth of literature is readily available on all aspects of PKU; any discussion here would be redundant. For the sake of completeness, it should be mentioned that these patients frequently exhibit a penetrating "musty" odor due to increased quantities of urinary phenolic metabolites of phenylalanine.

Summary

Almost 200 inborn errors of metabolism have been described. Since screening and confirmatory tests are often not available to the practicing physician, diagnosis may be difficult in many cases. Unusual odors are associated with maple-syrup-urine disease, intermittent branch-chained ketonuria, methionine malabsorption, Oasthouse disease, odor of sweaty feet syndrome, isovaleric acidemia and phenylketonuria. The detection of these odors should alert the physician to their diagnosis. If discovered at an early age, many can be successfully treated.

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Myasthenia Gravis and Epilepsy

Gordon J. Gilbert, M.D.

There exists a possible relationship between trimethadione therapy for epilepsy and the precipitation of myasthenia gravis. In 1966, Peterson[1] reported the development of myasthenia gravis in a patient whose petit mal epilepsy was being treated with trimethadione. In his patient, the myasthenia cleared gradually over a 4½-month period after discontinuation of trimethadione.

The patient described here also developed myasthenia gravis while receiving trimethadione for epilepsy. In this patient, severe myasthenia gravis persisted long after discontinuation of trimethadione, but proved to be quite sensitive to adequate anticholinesterase medication.

Case Report

A 35-year-old white woman was seen on April 11, 1968 with a chief complaint of generalized weakness with frequent falls of 10 years' duration. At the age of 14 years, the patient first experienced idiopathic seizures, both petit mal and grand mal, severe and long-lasting. They improved on a regimen of trimethadione and diphenylhydantoin. Because of gum hypertrophy this regimen was discontinued in 1964. The patient subsequently was treated with primidone 250 mg. four times a day, but she continued to have approximately two seizures a month, each lasting two or three minutes, exclusively at the time of her menses. They occurred without warning, often shortly after arising in the morning, and were of grand mal type with tongue biting.

In 1956, while on a regimen of trimethadione and diphenylhydantoin, the patient first noted difficulty in walking and weakness of the proximal portions of her upper extremities so that, for example, combing her hair was difficult. She also noted weakness in chewing and swallowing. A diagnosis of myasthenia gravis was made at the Presbyterian Hospital in Chicago and the patient started on a regimen of Prostigmin. Despite a regimen of 12 15-mg. Prostigmin tablets daily (two tablets every three hours during the day and two tablets at 3 a.m.), the patient was almost totally incapacitated by weakness. She was unable to do any housework; her husband had done all the cooking since their marriage in 1963. Her weakness worsened during the day and became more intense when she was nervous. Horizontal diplopia had been present since 1956, occurring transiently and varying with the extent of fatigue. Dysarthria also occurred when the patient was fatigued.

A number of head injuries had been suffered in the course of falls relating to the myasthenia gravis, but these postdated the onset of epilepsy. As an infant, the patient was given x-ray therapy for an enlarged thymus gland. There was no family history of either myasthenia gravis or epilepsy.

On examination, the patient was well-developed and well-nourished, alert and cooperative but appeared chronically ill. Blood pressure was 130/80. There was no resting ptosis. However, when she gazed upward for several minutes, a progressive ptosis appeared, greater in the right eye than in the left, to the extent that the pupil of the right eye became almost two thirds covered. When she rested her eyes, this bilateral ptosis cleared within 30 seconds and she again had natural lid retraction on upward gaze. A mild lid lag was seen when the eyes rested. As the patient looked straight ahead for 30 seconds, a slight vertical strabismus appeared and she complained of diplopia. In other respects the extraocular movements were full and there was no nystagmus. The pupils were 3 mm. round, regular and equal and reacted briskly to light. The smile was myasthenic with rather diffuse weakness and the patient was unable to whistle. There was a marked weakness of the orbicularis oculi muscles bilaterally, so that when she tried to close her eyes forcibly, they remained slightly open. There was a distinct loss of facial expressivity and when asked to use her facial muscles forcibly, some contraction fasciculations were noted. Movements of the tongue and soft palate were natural. There was no Myerson's sign, Chvostek's sign or snout reflex.

The four extremities were very weak, with better power distally than proximally. There was severe weakness of the shoulder musculature and of the biceps and triceps muscles bilaterally, so that they were readily overcome with faint effort. Similarly, the quadriceps and hamstring muscles were very weak. There was moderate power distally in the arms and legs. Fine finger movements were slightly impaired bilaterally as were alternating movements of the hands and toes. Sensation was perfectly intact to all modalities. The deep tendon reflexes were ½+ in the upper extremities and 1½+ in the lower extremities and the planter responses were weakly flexor bilaterally. The gait was markedly weak and rather floppy-legged and the patient required considerable support.

The chest x-ray was normal with no evidence of a thymoma. The serum electrolytes were normal. The hematocrit was 42% and the platelet count normal, but white blood cell count was 3,700 with a normal differential count of 64 polymorphonuclear, 32 lymphocytes, 3 monocytes and 1 eosinophil. The lupus erythematosus preparation was negative. The serum creatine phosphokinase was zero units. The serum protein electrophoretic pattern was normal with gamma globulin at the upper limit of normal (1.4 mg.%). The butanol-extractable iodine serum, T-3 uptake and serum cholesterol were normal.

An electroencephalogram on April 17, 1968 showed bursts of spike, polyspike, and high-voltage slow wave activity appearing bilaterally over the frontotemporal regions with alternating lateral preponderance. This record indicated the presence of a distinct seizure potentiality of psychomotor and grand mal type. An MMPI test on April 22, 1968 confirmed the presence of home maladjustments. The patient appeared overly sensitive to the responses and intentions of those around her and there was evidence of depression and discouragement.

Prostigmin was discontinued and instead a regimen of pyridostigmine, one 180-mg. Timespan every eight hours and one 60-mg. tablet three times a day begun for the myasthenia. She improved markedly and when seen on June 10, 1968 felt that she had regained full strength. She was able to carry on a full routine of housework, even performing such activities as washing venetian blinds. She had not tried running, but in other respects appeared to have no limitations. She was now doing

all the cooking, housework and shopping for her family. Examination on June 10 found full ocular movements and no ptosis. There was only a slight weakness of the biceps muscles bilaterally and the grip was firm bilaterally. Her smile was full. She could rise unassisted from a squatting position and her power was markedly improved generally. Because of a flurry of grand mal seizures, primidone was increased to 375 mg. four times a day and acetazolamide was introduced in dosage 250 mg. three times a day to be taken for 10 days during the period preceding and following her menses. Seizure control improved on this regimen.

Discussion

The case described by Peterson[1] and my case raise a question of causative relationship between chronic trimethadione therapy of epilepsy and the precipitation of myasthenia gravis. Peterson's case and the present one showed a dramatic, virtually complete reversal of the myasthenia with anticholinesterase therapy. This would be consistent with the myasthenia being of a physiological type, with little or no permanent pathological change.

The role of a possible immunologic effect of trimethadione was discussed by Peterson.[1] It is of interest, however, that in the pathophysiology of both epilepsy and myasthenia gravis, the chemical substance acetylcholine may be a particularly significant factor.[2] Thus, there is evidence that acetylcholine produced at the myoneural junction is in short supply in myasthenia gravis[3,4] while an excess of acetylcholine in the brain is one factor which may produce epileptic activity. Indeed, "anticholinesterase seizures" produced experimentally with anticholinesterase medication can be specifically blocked by atropine.[2] Although the mechanism by which trimethadione suppresses petit mal seizure activity is unknown, an inhibiting effect upon acetylcholine metabolism has been strongly considered. Tower[5] has indicated that some anticonvulsant drugs may obtain their therapeutic efficacy by the inhibition of synthesis of transmitter agents. It has been demonstrated[6] that diphenylhydantoin inhibits neuromuscular synaptic transmission in man and rat, probably by competitive inhibition of acetylcholine.

There may be a subtle inverse relationship between epilepsy and myasthenia gravis, relating to an opposite effect of acetylcholine upon the two conditions. Just as medication effective in treating myasthenia gravis can enhance a seizure potentiality by increasing brain acetylcholine concentration,[2] so might trimethadione unmask a latent myasthenia gravis in a susceptible patient by progressively reducing neuromuscular availability of acetylcholine. With regard to such inherent susceptibility, it is of interest that as a child the patient received a course of x-ray therapy because of a large thymus. This case suggests that once latent myasthenia is unmasked, it can persist for many years.

In view of the work of Norris[6] previously referred to, it appears likely that anticonvulsant agents other than trimethadione will be implicated in unmasking latent myasthenia gravis. The rarity of reported cases of trimethadione-unmasked myasthenia suggests, however, that very few epileptic patients harbor such latent myasthenia.

Summary

This is the second case reported in which myasthenia gravis developed in a patient receiving trimethadione therapy. Both cases have shown marked improvement on anticholinesterase medication. It is suggested that both the anticonvulsant action and the myasthenic effect of trimethadione upon the predisposed patient may relate to an inhibition of acetylcholine.

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Ear Stopples
A Defense Against Snoring

MARCUS H. BOULWARE, Ph.D.

According to a London otolaryngologist, 20% of snorers appear hopelessly incurable at the present time.[1] When medical treatment fails to alleviate the condition, spouses of the incurable snorers should consider wearing ear plugs as a defense technique.

Fabricant and Kelley[2,3] recommend tight-fitting ear stopples in self-defense against snoring.[2,3] Rudmose, former Southern Methodist University acoustic expert, reported that ear stopples do not completely silence noise so as to permit uninterrupted sleep. While traveling he found them useful in reducing unfamiliar ambient noises in hotel rooms. Sometimes he tuned the radio off-station as a masker of unwanted sound.

Ear stopples* have not been tested for effectiveness against snoring; however, it is concluded from research that noise can be reduced to the level of living room conversation or to that of a quiet rural garden.

Pros and Cons

In the spring of 1969, 75 nonsnoring newspaper respondents reported "they were elated over the effectiveness of ear stopples against snoring sounds."

One New York housewife said she could not sleep until she used ear stopples. "They dulled snoring so that it no longer keeps me awake."

Thirty-five newspaper respondents reported that ear stopples as a defense against snoring were "as good as nothing," or "they dimmed sound, but didn't deaden snoring."

"Ear plugs irritate my ears and I don't wear them to mask out snoring," said a North Carolina housewife.

"To ask a spouse to wear ear stopples to sleep amidst snores is an insult to injury," added a New York husband.

Just as dentures are not as comfortable as natural teeth, there is some initial discomfort in wearing ear plugs. Comfortability may take precedence over effectiveness against sound. At low frequencies, bone conduction is heightened while wearing ear plugs. To obtain the best results, instructions accompanying the product must be followed.

Conclusion

When the snorer cannot be cured, one way to solve the nuisance of noises is ear stopples worn by the nonsnorer. They can mask out snoring sufficiently to enable the nonsnoring listener to sleep, provided a wholesome attitude is established by the wearer. In addition to ear stopples, the listening spouse must help herself to go to sleep. Ear stopples will not work for the person who dares them "to let her go to sleep."

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Dr. Boulware, professor of speech pathology, was once an inveterate snorer who experimented with control techniques until he became a "controlled snorer." His study and research on sonorous breathing covers a period of five years.

*Manufactured by Maico, Surgical Mechanical Research Co. and Flents Products Co.

▶ Dr. Boulware, Department of Speech and Drama, Florida A & M University, Tallahassee 32307.



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Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis and pulmonary embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable. Retrospective studies in Great Britain and the United States have shown a statistically significant association between cerebral thrombosis and embolism and the use of oral contraceptives.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen. Therefore, if such tests are abnormal in a patient taking Ovulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives.

The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

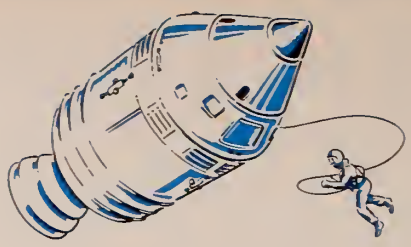
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Florida Medical | editorial

From the Editor

Franz Stewart

Gadgets

We all collect around any new gadget. This is common practice by those in the medical profession. A new tool is found and we cluster around, organize societies or specialties, and explore new areas of research. A creative mind or genius, or a lucky combination of factors, builds a new tool and then come the numerous artisans to develop its use and explore new vistas.

These new gadgets often develop in areas far removed from medicine. We collect around and apply them to our problems, just as fast as the transfer of new information from unrelated fields of study can reach receptive minds in medicine. We speak of the great progress in scientific knowledge in medicine in the last 50 years. Much of this is due to creative thinking plus the fact that we do cluster around new gadgets or tools. We cannot say how much of the great advance, of which we are so proud, is due to our own scientific discovery in medicine, or how much is due to the accident that the last 50 years in medicine was lived in an age of general scientific development which added tools for us to cluster about.

The microscope and various stains help us remember the name Virchow. The manufacture of plastic tubes opened the way for the development of heart and arterial surgery. How fast would the subspecialty of cardiology have developed had it not been for several gadgets such as the string galvanometer and the mechanical recording devices used by Sir James Mackenzie and Sir Thomas Lewis?

The important and fast-growing specialty of nephrology would have had trouble aborning were it not for plastic tubes and cellulose membranes. These gadgets or tools were not created by our profession.

So often, sharp thinking is stimulated by new tools, and it is good that our specialties and organizations are built around gadgets. This is also the means for the aging and demise of organization groups. New gadgets make new groups.

Man has always climbed on the ladder of gadgets. The first man to use a stick started a whole chain of development still in progress. He enabled us to rule other species. We like to say man is different from other animals because of his ability to think. That is unless we bring in religious belief.

This leads us to a debate. Do tools create thinking and permit human development, or does thinking create tools and control development? Creative thinking in its everyday use is simply built on the framework of visible gadgets. Fortunately for our future, there are creative minds which can imagine and can see beyond and map new routes. Here lies our hope, but this would be lost without our compulsion to cluster about gadgets. □


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Dr. Babers

Well Done, Henry!

Richard M. Fleming, M.D.

In this issue of The Journal, tribute is paid to Henry Babers' long and outstanding service to Florida medicine which is now climaxed by the completion of his term as President of the Florida Medical Association.

It is altogether fitting that we in the "Organization" section should add our praise and express our appreciation to him for an outstanding job in leading our Association this past year. Henry is the epitome of the ideal "organization man" in its finest sense—a man with a broad understanding of the problems of his confreres and an empathy with and loyalty to the ideals for which they strive.

He has, on the one hand, represented the many groups and differing points of view in our Association, while on the other, has led the way with a firm and fair hand to a common goal which we can all support.

To fulfill his duties as President of the Florida Medical Association, one must be prepared to sacrifice a considerable amount of time and energy. To do this when one is practicing solo, as in the case of the incumbent President, requires even more sacrifice and stamina!

Florida medicine has always been fortunate in producing leaders who seem to be "the right man for the right job at the right time," but never more fortunate than during the past year.

We salute you, Henry Babers: Well done!

Man After My Heart

J. Maxey Dell Jr., M.D.

Who would ever have thought that the puny little fella weighing only nine pounds at the age of one year would develop into that strapping muscular man? Yet, he showed promise early, he could direct his friends from his perch on the woodpile and an enormous amount of work was generated. He started talking about being a doctor at age 11, and old Jim called him Doc from then on.

There is a twinkle in his eye from his father and boundless energy from his mother. Honesty, integrity, humility and hard work were his in abundance from two of the finest people that it has ever been my good fortune to know: his mother Annie and his father Henry. His father ran a seed and plant store. My wife would have planted tomatoes in the hottest day in August if Mr. Babers had told her to. We had every confidence in Mr. Henry and that is the wonderful feeling that we now share in his son. This heritage from a wonderful father and mother also contains a deep faith in God, which enabled his father to meet, without complaint and with equanimity, a long and painful illness and has made possible the lovable and competent physician, his son. It carried his mother through two years of a disabling thoracic tumor back in the 20's when thoracic surgery was quite a problem. Dr. Haver operated successfully and Mrs. Annie is spry as can be today. It has befitted Henry to do a superb job as president of the FMA and will carry him to fulfill many tasks in medicine in the future.

A doctor values most the confidence and respect of his fellow physicians. With this, he can flatten mountains and fill valleys. This man enjoys that respect and confidence to a measure full and running over. Some men seek fame; others, by their deeds, dare fame not to seek them. Most of us want to help people and do things, but must have someone to show and tell them what to do. They cry, "If someone will only tell me what to do, I will be glad to do it." Well, Henry first did his work. He did this so well that most of us are willing to let him tell us what to do, and with doctors this is quite an achievement. Life, they say, is composed of ups and downs, and Henry has had his share of both; he has neither winced nor cried aloud. A man's man in every sense of the word. No equivocation, no beating around the bush, no put-on in this man. Loyal all the way. Hardheaded, but not adamant if he is wrong. We doctors can be sure that whatever tasks we give Henry in the future will be carried out with efficiency, honesty and diplomacy.

Medicine is fortunate to have this man in its ranks and we doctors to have him as a friend. We appreciate the many sacrifices that the proper fulfillment of the presidency of the FMA requires and say thanks to Henry and the presidents of the past and the future. Henry Babers has set an example that will be a standard for future presidents to aspire to.

▶ Dr. Dell, 428 Southwest Eighth Street, Gainesville 32601.

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REVISED PRESCRIBING INFORMATION

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended under Indications. The drug should not be prescribed for children because safe conditions for use have not been established.

General Adverse Effects: Because of the high potency of the drug and the variability of its potential to cause adverse reactions, the following are strongly recommended: 1) the lowest possible effective dose for the individual patient should be prescribed. Increased dosage tends to increase adverse effects, particularly in doses over 150-200 mg/day, without corresponding clinical benefits; and 2) careful instructions to, and observations of, the individual patients are essential to the prevention of serious and irreversible, including fatal, adverse reactions, especially in the aging patient.

Indications: Symptomatic relief of adult rheumatoid and degenerative joint disease unresponsive to adequate trial of salicylates and other measures of established value, such as appropriate rest. Has been found effective in active stages of: 1) moderate to severe rheumatoid arthritis including acute flares of chronic disease, 2) moderate to severe rheumatoid (ankylosing) spondylitis, and 3) moderate to severe degenerative joint disease of the hip (osteoarthritis of the hip). Has been found effective in relieving pain and reducing fever, swelling, and tenderness in acute gouty arthritis in selected patients. May enable reduction of steroid dosage in patients receiving steroids for the more severe forms of rheumatoid arthritis; in such instances the steroid dosage should be reduced slowly and the patients followed very closely for any possible adverse effects.

Contraindications: Children 14 years of age and under; pregnant women and nursing mothers; active gastrointestinal lesions or history of recurrent gastrointestinal lesions; allergy to aspirin and indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at times, severity of gastrointestinal reactions, be continuously alert for any sign or symptom signaling a possible gastrointestinal reaction. The risks of continuing therapy with INDOCIN in the face of such symptoms must be weighed against the possible benefits to the individual patient. Gastrointestinal effects may be reduced by giving the drug immediately after meals, with food, or with antacids. Use greater care in aging patients.
Ocular Effects: Corneal deposits and retinal disturbances, including those of the macula, have been observed in some patients on prolonged therapy. Discontinue therapy if such changes are observed. Ophthalmologic examination at periodic intervals is desirable in patients on prolonged therapy.
Central Nervous System Effects: INDOCIN (Indomethacin, MSD) may aggravate psychiatric disturbances, epilepsy, and parkinsonism, and should be used with considerable caution in patients with these conditions. If severe CNS reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants a thorough ophthalmologic examination. Patients should be cautioned about engaging in activities requiring mental alertness and motor coordination, as driving a car. Headache which persists despite dosage reduction requires complete cessation of the drug. May mask the usual signs and symptoms of infection; therefore, the physician must be continually on the alert for this and should use the drug with extra care in the presence of existing controlled infection. After the acute phase of the disease is under control, an attempt to reduce the daily dose should be made repeatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations of the esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage, with fatalities in some instances; gastrointestinal bleeding without obvious ulcer formation; perforation preexisting sigmoid lesions (diverticulum, carc noma, etc.); rarely, increased abdominal pain ulcerative colitis patients or development of u cerative colitis and regional ileitis; gastriti which may persist after the cessation of th drug; nausea, vomiting, anorexia, epigastric di tress, abdominal pain, and diarrhea.
Eye Reactions: Corneal deposits and retinal di turbances, including those of the macula, ha been observed on prolonged therapy; blurring vision.
Hepatic Reactions: Rarely, toxic hepatitis ar jaundice, including some fatal cases.
Hematologic Reactions: Aplastic anemia, hem lytic anemia, bone marrow depression, agranul cytosis, leukopenia, and thrombocytopenic pu pura. Since some patients manifest anemia se ondary to obvious or occult gastrointestin bleeding, appropriate blood determinations a recommended.
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Central Nervous System Reactions: Psychotic ep sodes, depersonalization, depression, coma, co vulsions, peripheral neuropathy, drowsines mental confusion, lightheadedness, dizzines headache.
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Cindi

Cynthia Gilliland

This sixteen-year-old student at the Gainesville High School gives us the cover picture of Dr. Babers. This qualified scuba diver loves her horse, plays the piano passably, takes good care of her coal-black cat and, with her blue eyes and blonde hair, does a pretty good job of bridging the generation gap and captivating others as she has us with her photograph and cover picture.—Ed.

Dialogue

He Sought Help

Joseph S. Stewart, M.D.

I wonder how most of us would have met this medical problem. Can you shrug and ignore the illness? Can the medical association lead? We would like to learn more. —Ed.

He was a drop-in: tall, quite thin, with a gaunt expression. His clothes were somewhat disheveled; he needed a shave; but by no means did he give the impression of the long haired "hippie" of Coconut Grove. His voice was well modulated and his diction that of one of culture. "I am a heroin addict and have been on methadone awaiting my turn at the clinic at Jackson Memorial Hospital. They have promised to accept me in eight days and I am begging you to give me a prescription for enough methadone for eight days. I take eight tablets a day." I asked him where he was getting his prescriptions filled and he named one of the local drug stores. On inquiry, the pharmacist informed me that he was filling prescriptions for this addict and only this addict, as he thought he was deserving and was really trying to get off of heroin. I gave the man a prescription for 32 methadone tablets, 10 milligrams each.

In four days the young man returned to my office for another prescription. He was now cleanshaven and his clothes were nicely pressed. He was composed and did not have the gaunt, haunting expression seen on his first visit. I gave him the second prescription for 32 tablets. At the end of four days he was back in the office again, saying that he could not be taken at Jackson for two or three weeks and that he had seen Mr. Weinstein, who is in charge of the Jackson clinic. Mr. Weinstein informed me the man had been in the night

Dr. Stewart is Past President, Florida Medical Association.

before, for the first time; it was true that they could not take him in for two or three weeks. I asked Mr. Weinstein what I could do in the meantime to help this man and he stated that the only thing he knew to do was to call the Federal Narcotics Bureau and get their advice.

I described the problem to Mr. Acri of the Bureau and asked him for any information he could give me on what the law was and what my rights were and what I could do to help this apparently deserving man. Mr. Acri thanked me very much for calling and telling him what I had done. He informed me that the statutes definitely stated that it was contrary to law to prescribe a narcotic to an addict except for definite medical reasons. He suggested that the only thing he knew that I could do was to have the man apply to the State Attorney for admission to the National Institute of Mental Health Clinical Research Center at Lexington, Kentucky.

Reluctantly I informed this young man of the information I had received and of how my hands were completely tied by law and that any prescriptions I wrote from now on would be illegal and if the pharmacist filled them he would also be in an untenable position. I talked to the pharmacist and he said that he would not, under any condition, fill any more prescriptions as he had done all he could possibly do within the law. The young man was quite upset and disappointed. He said he would now have to go and pay the exorbitant prices of the peddlers.

What a tragedy! Here was a young man whom I believe was actually trying to get off of heroin and the druggist felt too that he was most deserving, yet our hands were tied by law and we had to turn him over to the wolves until he could, in due course of time, be taken in at the Jackson Memorial Hospital clinic for help.

A few days later I was describing the problem of this young addict to a group of friends and one of them said he knew a Father Harrison who was doing considerable work along this line and suggested that I get in touch with him. I went to see Father Harrison at his office, "The Spectrum," which translated means "comprehensive drug program that has as many facets as a spectrum," and told him my story, asking him what I could have done or what I could do now. He stated that he had spent many years studying this problem and was so sorry I had not been in touch with him earlier, as he could have taken this young man over, indicating he was able to help such persons apply to the Jackson Hospital clinic and also help them get into the Lexington Center.

I suggested to Father Harrison that it seemed to me he was derelict in his duties in not letting me and the other doctors of Florida know about his excellent work so that when such problems confronted us as physicians we could seek his advice. Father Harrison stated that he would be so happy if I could make that remark on television and let him answer it on television because he had found it most difficult to get before the general public and the doctors in that he did not have the influence with the press that other workers in this field seem to have. I asked Father Harrison to write his suggestions and what he might be able to do to help these addicts or to advise physicians what to do when they are confronted with the problem we have outlined.

▶ Dr. Stewart, 3384 Mary Street, Miami 33133.

Help for the Drug Addict

The Rev. Frederick C. Harrison Jr.

When Dr. Stewart told me of his experience with this addict, I had a number of mixed feelings. My immediate reaction was that the addict had played the old game with the doctor which we call "making a doctor"—and the doctor had been beaten by the junkie's game.

On the other hand, the doctor, in my opinion, was doing what he really thought was right, in helping a troubled patient—and he certainly did do the right thing by checking out the legality of his actions when the patient twice returned. However, clinically, it was something that did not really help the addict. All it did was place in the addict's possession quantities of an addictive drug which he was incapable of using responsibly. This is why we have methadone clinics for such purposes.

It was also rather upsetting to think that Dr. Stewart did not know about existing programs for rehabilitation of narcotic addicts, because so often in large communities the news media fail to communicate the reality of such a complex problem. Their main interest is in selling newspapers, and to sell newspapers they've got to have exciting, interesting stories about the right people. I make this kind of an indictment of the news media about the drug problem, since they do make drugs

Fr. Harrison is executive director, SPECTRUM, Miami.

exciting and mysterious, forgetting that we are dealing with human life, and that drug addiction is something which destroys human life. Therefore, when Dr. Stewart indicted me for not letting our experience and our resources be known and available to the community, I felt that that indictment should be shifted to the news media.

The program entitled SPECTRUM has been in operation in Dade County for about 18 months. We are under contract with the National Institute of Mental Health, which means we have some HEW funds. We started out with one office, a part-time secretary, and one patient being returned from Lexington on the NARA program (Narcotic Addict Rehabilitation Act of 1966). We now have a contract for 60 patients, plus an addition to our contract permitting us to do an evaluation and examination of another 60 patients prior to admittance to Lexington. We also have a therapeutic community, called SPECTRUM House, using the existential concept of Dr. Efrem Ramirez. The therapeutic community has proved to be the most effective form of treatment of the hard-core addict. We also have a staff of ex-addicts who have been through the process, and we have many years of experience in counseling and guidance to offer the community. Our experience is also extended to training.

In addition to those whom we can help with federal funds, we offer the same comprehensive in-depth program as to counseling, vocational rehabilitation, individual and group therapy, and social services to any clients who come to us. This is the in-community facet of our program and by far contains the largest segment of clients. We make no charge for counseling or any other phase of the program, but since any funds for this service must come from the community, we cannot offer housing, clothing and subsistence allowances to everyone in this group.

Therefore, SPECTRUM comprises three large segments: those clients under the NARA program, the in-community clients, and those in residence in SPECTRUM House. In between all of those, we do many hours of workshop training with junior and senior high school groups, adult groups, and service organizations. The only one of these phases which is federally funded is the NARA program. For all others, we must look to the community for support, especially for SPECTRUM House.

We think it is important that we face the reality that medicine alone, and traditional psychotherapy, is not the answer to the treatment of this problem. We need these as components, along with many modalities, which means that the medical profession and the psychiatrists themselves need to broaden their experience. About the only experiences they have had with narcotic addicts have been those of failure, and there are reasons for this, since their treatment was restricted to their own field.

We have something going in terms of a comprehensive form of treatment, and we would like to give it away to the state of Florida. In order to do this, we need the help of the news media as well as that of the medical profession.

In some sense, the drug addict is a highly distilled symbol of our entire civilization—with more of the weaknesses, anxieties, pains and fear which every sensitive human being experiences. Because "using drugs" is only the symptom and not the problem, and because it is impossible to have sufficient law enforcement to insure us of a genuinely drug-free environment, we must strive to reduce the addict's desire and need for drugs, so that there will be no market for this illegal traffic.

There are ways of treating these people when they come to the doctor's office, but the doctor needs to know what he is dealing with. As was said earlier, a narcotic addict is a master at playing games. And of course, in this case, the name of the game is "Make the doctor feel guilty, so I get what I want." There are forms of treatment available in which the doctor can make a referral and take a stand. The doctor is also going to have to take a stand to force our community and those in positions of political responsibility to make decisions that are going to deal with the problem and not just offer band-aid services to let the public know they are "doing something."

When an addict comes to a doctor and he knows that he is an addict, the doctor's attitude should be—"Who is in the business of dealing with addicts?"—and then send him to those people. SPECTRUM, located at 900 S. E. First Avenue, Miami, is one of those agencies. Some others are: Operation Re-Entry, on Miami Beach; Operation Self-Help, Inc., Miami and if the addict indicates a desire to enter the NARA program, he should be sent to the Assistant United States Attorney's office in the Federal Post Office Building, Miami, who will arrange a hearing before a District Judge and have him voluntarily committed to Lexington.

And when an addict says, "Well, doctor, if you don't give me the prescription I'm going to have

to go out and steal"—doctor, that's just part of the game. The physician then has a responsibility to say "No"—and refer him to a treatment program. If there were enough "no's" by the physicians, we would probably have the addicts lined up at our doors for treatment, because it's been our experience in the state of Florida that the physicians are one of the major sources of drugs for the addict—and of course, it's all legal.

We have tried to reach the physicians with this information, but we have not been successful, as doctors are very busy people who do not have time to attend workshops conducted by the people who really know what it is all about—the ex-addicts. Comprehensive and lasting rehabilitation is a very expensive matter. There are no cheap short-cuts, but rehabilitation is not as expensive as the cost of maintaining an addict's habit over the years. The upwards of 4,500 known addicts in the state of Florida are presently supplying themselves, through illegal activities, with millions of dollars' merchandise annually to support their addiction. Comprehensive rehabilitation programs and continuing education are, in reality, the most economical way of doing away with addiction. It can be done—but the physician's help is sorely needed.

▶ Fr. Harrison, 900 S.E. First Avenue, Miami 33131.

The Squeaky Wheel

Matthew E. Morrow, M.D.

There is an old saying that goes something like this: "A fig for those by laws protected; Liberty is a wonderful thing. Churches were made to please the priest and palaces but to please the king." I have heard many teachers complain that schools are built to glorify the architect and please the board but that no one had ever used their years of experience in the classroom to rectify age-old errors. It is apparent from the literature that this holds true with hospitals as well. In the "Current Status of Intensive Coronary Care," Dr. Kitchell points out that the average architect's ideas often do not fit the physician's needs for a coronary unit, and this is the area of my interest today. *But* this is a "slide" lecture, so let us consider the first slide.

SLIDE #I. This depicts a Saturday night in an emergency room, familiar to any doctor. Your attention is first called to the violent fight going on between a drunk and several police officers aided (?) by some employees of the emergency room. Although there is no sound accompanying this slide, I'm sure your sonic recall is good enough to hear the volume and tone if not some of the actual words. Close by you can see two accident victims whose moans and groans are all but drowned out by the hysterical screaming of their families, friends and neighbors who carefully gathered around them obstructing any possible medical care —even as they demand that *"Something be done now!"* And this patient to the right on our slide is quiet now, but she was rushed into the emergency ward amidst great urgency and confusion. Now "couched supine, her beauty lily-white," carefully coiffured and made up she lies stoically in her very best silk gown. You all recognize her. She's the one who took the overdose of pills—hers and a friend's.

Among others you will recognize in this first slide are the elderly emaciated patient with an old stroke fresh from a nursing home, the frightened child with a cut thumb and his even more frightened parent or two—or three—the convulsive, the nervous and so forth. But wait. You missed the quiet middle-aged (25-65) man in the center of this bedlam. He has chest pain, and he's learned already that even minor effort increases the crushing sensation that seems to radiate to his jaw and down his left arm and causes him to sweat more and breathe more heavily. So he lies perfectly still and quiet, although his eyes may be wide with horror of the surrounding scene.

SLIDE #II. This is a close-up of the patient we almost missed. The drunks will be dried out, bleeders controlled, and the frightened child will go home with his still frightened, often hostile, parents, but the quiet one has become eternally quiet. The only sounds we could hear, if we had a sound

track, would be the stifled sobs of the family he has just left behind.

SLIDE #III. This is a good coronary care unit and you can see that it is orderly, cheerful and quiet. The patients appear relaxed, contented and although the supervising nurse can see all of them they are aware only that their dignity and privacy is secure. This slide is reassuring to you as doctors, too, because the trained personnel know what to do about serious arrhythmias and, more important, can prevent them almost entirely. The patients you see here are the so-called "good risk" ones who shouldn't die.

SLIDE #IV. This slide is a picture of the usual coronary care unit. The physical plant is the same one you just saw and I assure you the other facilities and the specially-trained nurses are just as good. But, we see here patients with strokes, heart failure, emphysema and yes, this one has uncontrolled upper G.I. bleeding and this one has asthma. Perhaps they need medical intensive care but they are making this unit ineffectual. No matter how cheerfully decorated and well lighted this unit is there is a feeling of impending disaster and foreboding, and each death and every emergency takes its toll on the coronary statistics of such a ward.

SLIDE #V. Here in slide five you have a better coronary unit. It is precisely the same unit we viewed in the third slide. There is an additional anteroom, however, and this is for patients like the quiet one we almost missed in slide one. The patient is brought here promptly, usually by a rescue squad, without waiting for the emergency room to quiet down (after the squeaky wheels got their oil) to be seen and even before admission papers are properly filled out and signed—both in the emergency room and then the admission office. All of us know that the early hours of infarction are perhaps the most important, and the survival rate is in direct relationship to the promptness of treatment, so this slide should make us feel better.

Since the first coronary care units were started some six years ago much has been learned and recorded but there has been an amazing lack of addition (or summing up) of the various new items presented to us. It has always been harder to change an established format than find something entirely new. In fact the physicists will probably discover the quarks that are thought to exist beyond the subatomic particle before we have a really good coronary care unit which obviously should be on the first floor with a special entrance best located at or by a common emergency room entrance. It should be under the command of a physician who has the authority to treat any patient, admitted promptly, and talk to the attending doctor later, from the time the patient arrives at the emergency coronary anteroom until he is discharged from the unit.

In the meantime, the emergency room should have at least a few well equipped and soundproofed rooms where the quiet ones can be taken. There should be a continuing course in coronary care so that emergency room personnel are always up-to-date in caring for them. Perhaps this alone will assure the "good risk" patient a better chance of getting to the coronary care unit with a minimum of delay. Which slide depicts your coronary unit? Which slide represents the unit to which you would like to be admitted when you have your coronary?

Title XIX (Medicaid)

Dr. James A. Bax, Secretary
Department of Health and Rehabilitative Services
State of Florida

Dear Dr. Bax:

At a recent meeting of the Madison County Medical Society, we had an opportunity to discuss the information received from your office concerning Title XIX (Medicaid). We were quite unhappy with the program as presently planned, and have no special desire to participate. Your letter states that a physician may discontinue participation in the program at any time. This seems to be an oversimplification of the problem. No one has yet told us where there is a physician nearby who is willing to participate in the program and who will take those patients referred by us if we do not participate.

We are particularly unhappy with three aspects of the program. First, we think it unfortunate that the legislature appropriated funds "quite inadequate" to support the program, thus expecting physicians to subsidize the program, rather than allow all taxpayers to share in the cost.

Second, the requirement that a telephone call must be made for each patient visit to the office, each admission to the hospital, and each visit to a patient's home or to the emergency room seems to be a most unusual, inefficient, and burdensome method of billing. Evidently the program was set up for the physician who sees an occasional Medicaid patient, not for the office that sees such patients several times daily. Since sick patients have to be seen anyway, why is "prior authorization" needed?

Third, we object stenuously to the requirement that the physician sign your request for payment form, stating that "I will accept payment by the Division of Family Services as payment in full for services rendered." We must reserve the right to determine our own fees. If we did not do this, we would not stay in business in an area such as this where there are more than 2,000 patients receiving welfare aid in a county of less than 15,000 population. Again, please tell us where we can find a physician who is willing to take over all of these patients and treat them for nothing, or for one-fourth or one-half usual physician's fees?

W. J. Bibb, M.D., President
Madison County Medical Society

Dear Dr. Bibb:

This will acknowledge receipt of your letter in which you enumerated some of the dissatisfactions of the Madison County Medical Society with Florida's Title XIX (Medicaid) program. We especially appreciate this type of constructive criticism, and every effort will be made to respond clearly and with equal candor. An attempt will be made to discuss each of the problem areas in order of your presentation.

First, you explained that the legislature appropriated funds "quite inadequate" to support the program, thus still expecting physicians to subsidize the program, rather than allow all taxpayers to share the cost. The appropriations for Medicaid are for only a six-months program, and by legislative intent, provide a most minimum program for a specified group of people, the state categorical welfare recipients. It was never intended that this initial program would completely cover the recipients' needs for physician services, hospitalization, or any of the other services included in the plan. One might view this initial effort as a trial period for developing and refining the necessary machinery to effectively administer this extremely complex operation.

In reviewing the overall Medicaid appropriation, it should be kept in mind that the funds for physician services of approximately $2.6 million are not significantly out of line with the funds available for the other types of health care in the plan, nor is the physician percentage of the total appropriation inappropriate when compared to the funding of other state Medicaid programs or when compared to national expenditures for private health care. Although a disproportionate amount of the total physician appropriation in Florida could conceivably be used for supplementing Medicare payments for the aged, evidence to date on utilization indicates that this will not be the case.

Prior to January 1, 1970, the state categorical recipient was provided certain limited health care by the Division of Family Services under several of the Social Security titles. Physicians' services were not among those services so provided. Effective January 1, 1970, all existing health care for these individuals was consolidated under Title XIX, and several additional services were added to include those rendered by a physician. The $2.6 million, while inadequate for complete physician care at usual and customary charges, would appear to provide considerable relief since there were no funds for this purpose before January 1, 1970. While there may be merit to your suggestion that physicians are having to subsidize this program, it should be remembered that all providers of services are in the same manner so affected. Also, it could be logically argued that physicians are subsidizing care for the welfare recipient under Title XIX in an amount of $2.6 million less than any previous six months in the past.

Your second concern relates to the requirement of "prior authorization" by a phone call for each visit or admission which you describe as an inefficient and burdensome method of billing. You state that the program was set up for the physician who sees an occasional Medicaid patient, not for the office that sees such patients several times daily. You ask why "prior authorization" is needed at all since the patients have to be seen anyway.

We understand and appreciate your dissatisfaction with the "prior authorization" by phone procedure for each visit. It is rather obvious that

this requirement might be burdensome where large numbers of recipients are seen in one office; however, it was never intended that the operation would be more convenient for one type physician than another and it was therefore not designed with this in mind. The procedures were developed as a result of deep concern by both the legislative and executive branches of government. Medicaid program operations throughout the nation have been chiefly characterized by a lack of fiscal control. Since 1965, state after state with Medicaid programs found themselves in deep financial difficulty after brief periods of operation in spite of elaborate utilization review mechanisms and other restraints. In most instances, these expenditure problems were never known or detected until long after the fact, simply because health care utilization and costs are extremely difficult to project and states generally have had very poor systems for early reporting.

In view of the experience of other states and in view of the legislature's provision for a most minimum program, the Department of Health and Rehabilitative Services, through the Division of Family Services, adopted the present system of "prior authorization" as a means of avoiding the serious fiscal problems so common in most Medicaid programs. We are fully aware that these procedures do make certain demands on the providers. While serving well the cause of fiscal responsibility, they are, by no means, infallible, and refinement and improvement are essential. It is especially important that we find ways of simplifying the program to better accommodate physicians, and especially those who see large numbers of recipients, such as the situation in your county. We would welcome the Madison County Medical Society's assistance in this regard.

Your third and last objection pertains to the statement on the billing form which reads, "I will accept payment by the Division of Family Services as payment in full for services rendered." This particular regulation applies to all services under Medicaid except nursing home care, where for a brief period there can be supplemental payments. While your objection to this regulation is understandable and reasonable, the requirement is based on federal policies which have been unsuccessfully challenged many times in the past. However, we would have no objection to challenging this requirement once again.

With respect to Madison County, we do not clearly comprehend two aspects of your situation. First, how have physician services for these same welfare recipients been provided for in the past? Secondly, how does the availability of funds, where none previously existed, create a financial problem for the physicians? Perhaps with some better understanding of these questions we could be in an enlightened position regarding your problems.

Again, accept our thanks and appreciation for your timely remarks. You can be assured that we shall diligently seek to find ways to make the program more attractive and acceptable to the practicing physician. It is fully understood that the effectiveness of Medicaid directly relates to the interest and involvement of the practicing physician in Florida and you can be assured that your remarks are significantly important to us.

James A. Bax, Ph.D., Secretary
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Our Mail

Dear Editor:

As a constant reader of the JOURNAL, one who admires both the professional quality of its content and the beauty of its make-up, I should like to call your attention to an omission. It may be of little moment to you but it is important to our membership. I speak of the omission of our organization from the table of "Florida Organizations of Medical Interest-Meetings and Officers."

Ours is the Florida component society of the Industrial Medical Association. The F.I.M.A. has been in formal existence for more than six years. The list of officers is printed at the left of the letterhead. Our next meeting will be in West Palm Beach in Octobér 1970. The JOURNAL very kindly published the notice of our 1968 meeting in the September and October 1968 issues. I will send you the exact information on our next meeting well in advance, again requesting publication. Meanwhile we would greatly appreciate favorable consideration of our request for monthly listing in the JOURNAL as a Florida "Organization of Interest."

JOSEPH A. BAIRD, M.D.
SECRETARY-TREASURER
FLORIDA INDUSTRIAL MEDICAL ASSOCIATION
BRADLEY

Dear Dr. Baird:

We appreciate very much your letter calling our attention to the omission of the Florida Industrial Medical Association from the list entitled "Florida Organizations of Medical Interest Meetings and Officers" in the March issue of the JOURNAL.

We thought you might like to know that the criterion we have followed for including the names of state specialty societies in this list is that they must be recognized officially as approved specialty groups by the Association's Board of Governors. A check of our records reveals that the Florida Industrial Medical Association applied for such recognition in 1968 and that the Board of Governors approved the application subject to the amendment of your group's bylaws to require membership in the FMA of your members to conform with standard FMA policy regarding specialty groups. Because there has been no response on this question from your association subsequent to that time, the official recognition still is pending.

In your letter you also mentioned that the JOURNAL published a notice of your 1968 meeting in our list of "FMA Approved Postgraduate Meetings." This we were very happy to do in that the Florida Industrial Medical Association applied for, and received, approval of the FMA Committee on Postgraduate Education for its Second Industrial Health Conference held October 18-19, 1968 in Tampa.

Thank you very much for calling this matter to our attention. The JOURNAL is anxious to assist your organization in every possible way and we hope you will keep us informed of your activities.

FRANZ STEWART, M.D.
EDITOR



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References: 1. Olsen, J. R.: Journal-Lancet 85:287 (July) 1965. 2. Lechevalier, H.: Antibiotics Annual 1959-1960, New York, Antibiotica, Inc., 1960, pp. 614-618. 3. Giorlando, S. W., Torres, J. F., and Muscillo, G. Am. J. Obst. & Gynec. 90:370 (Oct. 1) 1964. 4. Friedel, H. J.: Maryland M. J. 15:36 (Feb.) 1966.

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Brief Summary of Prescribing Information–9-9/22/69. For complete information consult Official Package Circular.

Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.

Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.

Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.

Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.

Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)

Usual Dose: 1 tablet b.i.d.

Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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The need for nutritional support...
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lethamphetamine HCl	1.0 mg.	1.0 mg.
yanocobalamin	2.5 mcg.	1.5 mcg.
hiamine HCl	—	5.0 mg.
hiamine mononitrate	10.0 mg.	—
iboflavin	5.0 mg.	—
iacinamide	50.0 mg.	—
yridoxine HCl	3.0 mg.	—
alcium pantothenate	20.0 mg.	—
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Indication: For use in aging patients of both sexes.
Contraindication: Carcinoma of the prostate, due to methyltestosterone component.
Side Effects: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.
Suggested Dosage: *Male and female*—1 Tablet or Capsule or 3 teaspoonfuls Liquid, daily or as required.
In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).
In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.
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Precautions: As with other thyroid preparations, an overd may cause diarrhea or cramps, nervousness, tremors, tachyc vomiting and continued weight loss. These effects may begin four or five days or may not become apparent for one to three w Patients receiving the drug should be observed closely for sig thyrotoxicosis. If indications of overdosage appear, discon medication for 2-6 days, then resume at a lower dosage lev patients with diabetes mellitus, careful observations should be for changes in insulin or other antidiabetic drug dosage re ments. If hypothyroidism is accompanied by adrenal insufficien Addison's Disease (chronic subcortical insufficiency), Simmo Disease (panhypopituitarism) or Cushing's syndrome (hypera alism), these dysfunctions must be corrected prior to and d SYNTHROID (sodium levothyroxine) administration. The should be administered with caution to patients with cardiovas disease; development of chest pains or other aggravations of diovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarctio

Side effects: The effects of SYNTHROID (sodium levothyro therapy are slow in being manifested. Side effects, when the occur, are secondary to increased rates of body metabolism: sv ing, heart palpitations with or without pain, leg cramps, and we loss. Diarrhea, vomiting, and nervousness have also been obse Myxedematous patients with heart disease have died from at increases in dosage of thyroid drugs. Careful observation of patient during the beginning of any thyroid therapy will aler physician to any untoward effects.

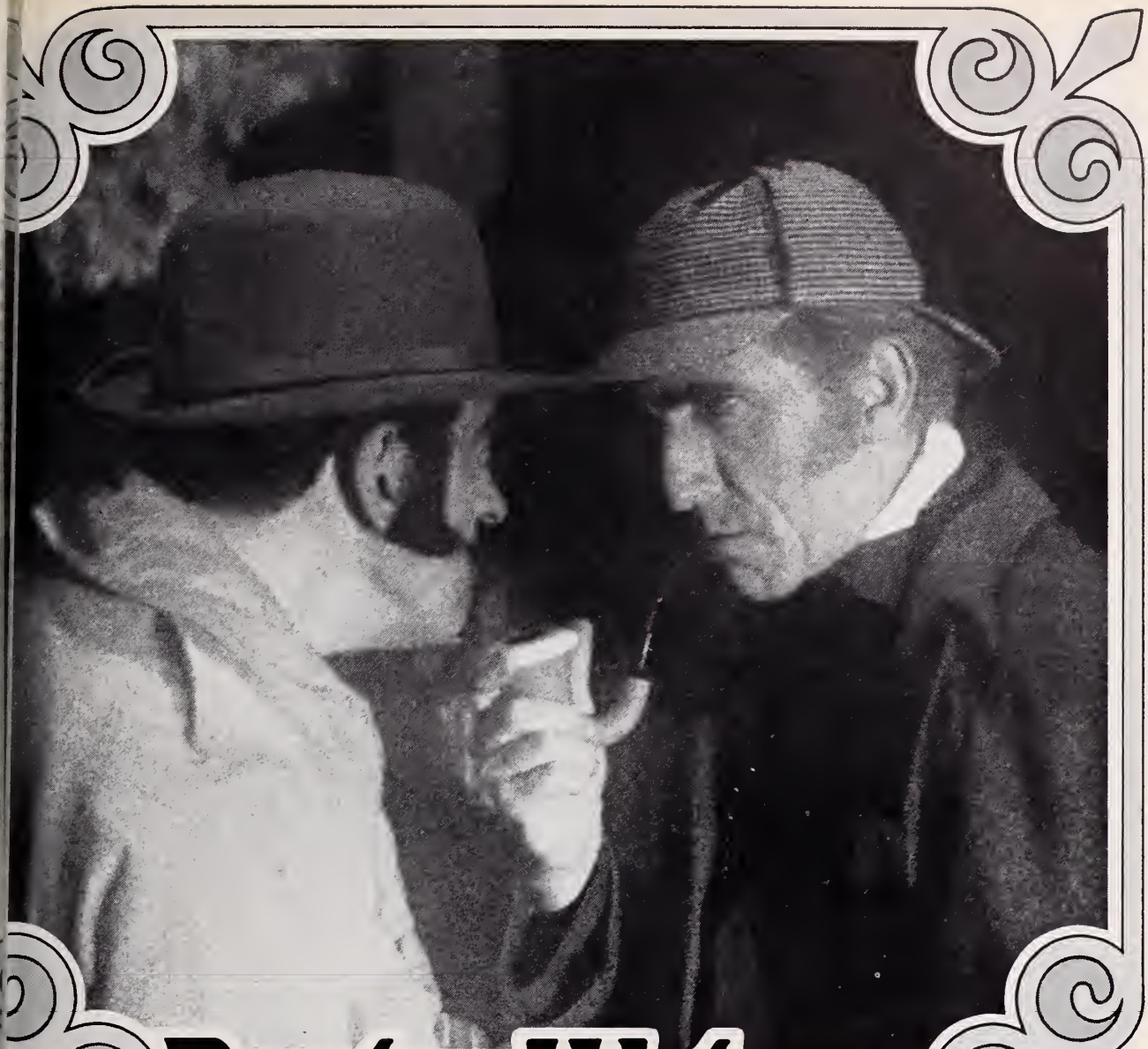
In most cases with side effects, a reduction in dosage followe a more gradual adjustment upward will result in a more accu indication of the patient's dosage requirements without the app ance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHR (sodium levothyroxine) TABLET is equivalent to approximately grain thyroid, U.S.P. Administer SYNTHROID tablets as a si daily dose, preferably after breakfast. In hypothyroidism wit myxedema, the usual initial adult dose is 0.1 mg. daily, and ma increased by 0.1 mg. every 30 days until proper metabolic balan attained. Clinical evaluation should be made monthly and B measurements about every 90 days. Final maintenance dosage usually range from 0.2-0.4 mg. daily. In adult myxedema, sta dose should be 0.025 mg. daily. The dose may be increased to mg. after two weeks and to 0.1 mg. at the end of a second two we The daily dose may be further increased at two-month interval 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg mg., 0.5 mg., scored and color-coded, in bottles of 100 and 500. In tion: 500 mcg. lyophilized active ingredient and 10 mg. of Mann N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chlo Injection, U.S.P., as a diluent.

SYNTHROID (sodium levothyroxine) INJECTION may be adm tered intravenously utilizing 200-400 mcg. of a solution contai 100 mcg. per ml. If significant improvement is not shown the fol ing day, a repeat injection of 100-200 mcg. may be given.

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n the Embankment. Two figures emerge into silhouette against a l street lamp. The flare of a match reveals the profile of Sherlock es. As he lights his calabash, his companion speaks:

ove, Holmes, that amazing intuition of yours has proved right . What we're looking for is a single entity. I thought we were g with several others—even twins. But now—I'd say we've ered a double agent."

me more, Watson, and be quick about it!"

son withdraws a folded paper from inside his greatcoat, and aloud from it):

key to the whole cypher is SYNTHROID (sodium levothyroxine)"...

h! Watson, not so loud! You'll alert our quarry."

son continues): "A single entity that serves two functions."

aster stroke, Watson."

low along, Holmes. In the neighborhood of 95% of the circulating hyroid hormone is levothyroxine—T_4 as you call it. T_4 is bound yroxine-binding proteins in the serum. It becomes available only ually to tissue cells—as free thyroxine."

"Is that why there's such a smooth, predictable response, Watson?"

"Quite! With agent T_4, SYNTHROID, the chances of a precipitous rise in metabolic rate are lessened."

"But how does 'free' thyroxine fit into the picture?"

"Well, Holmes, you might call it the tissue thyroid hormone—because 'free' thyroxine (that is, thyroxine not bound to protein) is active at the tissue level. It is gradually released from thyroxine-binding proteins. Each daily dose of SYNTHROID is mostly bound to thyroid-binding proteins, and slowly released as 'free' thyroxine—the form in which it is metabolically active."

"Magnificent, Watson! So protein-bound thyroxine is the major form of circulating thyroid hormone, and it is released as 'free' thyroxine. And that's why SYNTHROID is able to simulate the normal process so artfully. Q.E.D."

"Not so fast, Holmes. SYNTHROID works for the *physician*, too. Because its dosage is more precisely controllable, and because response is so smooth and predictable, the *doctor* gets fewer phone calls in the wee hours from agitated patients. Both parties get more sleep!"

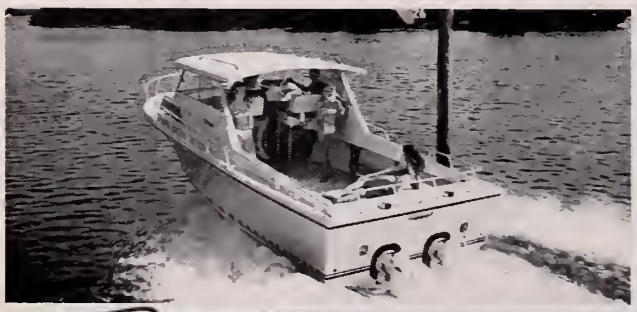
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Florida Medical meetings

FMA Approved Postgraduate Meetings

MAY

13-16 Greater Miami Pediatric Society Seminar, Jackson Memorial Hospital, Miami. For information: Retha Schiess, M.D., 7001 Galloway Rd., Miami 33143.

14-16 Current Cancer Concepts, Mount Sinai Hospital Auditorium, Miami Beach. For information: Public Relations Office, Mount Sinai Hospital, 4300 Alton Rd., Miami Beach 33140.

JUNE

8-13 Fourth Annual Workshop in Electrocardiography, Hamilton, Bermuda. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg, Fla. 33705.

NOVEMBER

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, University of Florida, Gainesville. For Information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

DECEMBER

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings Held in Florida

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

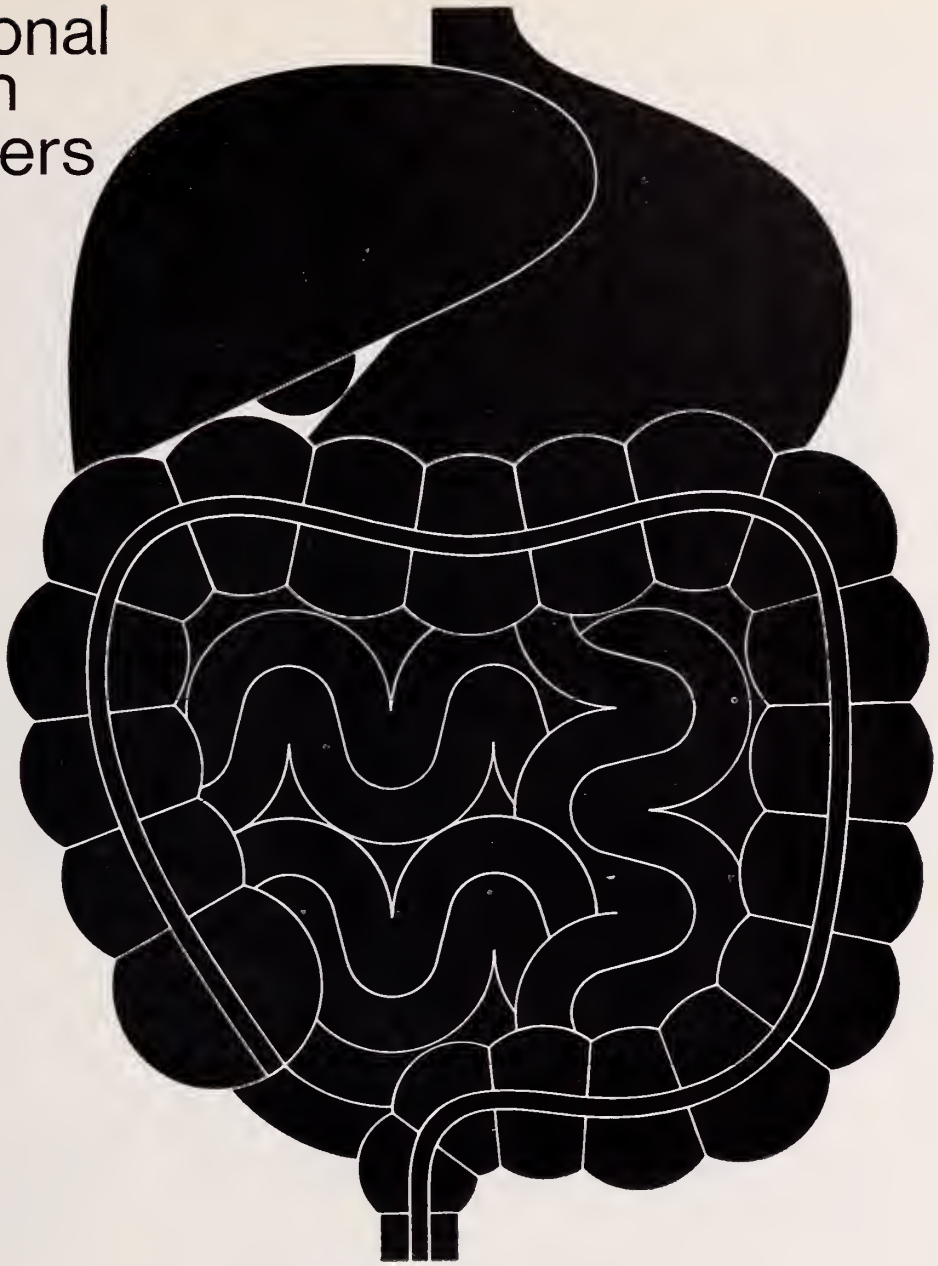
17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

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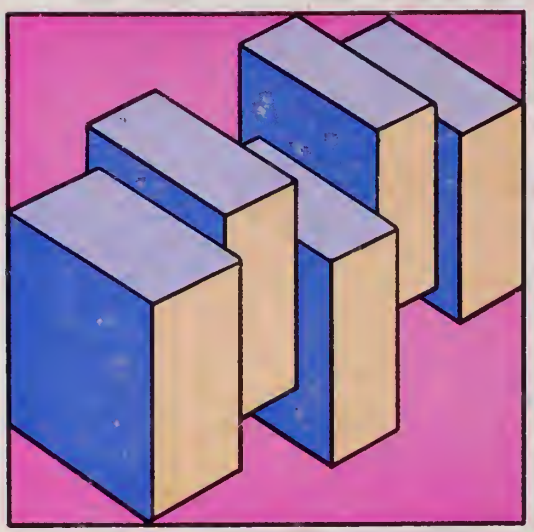
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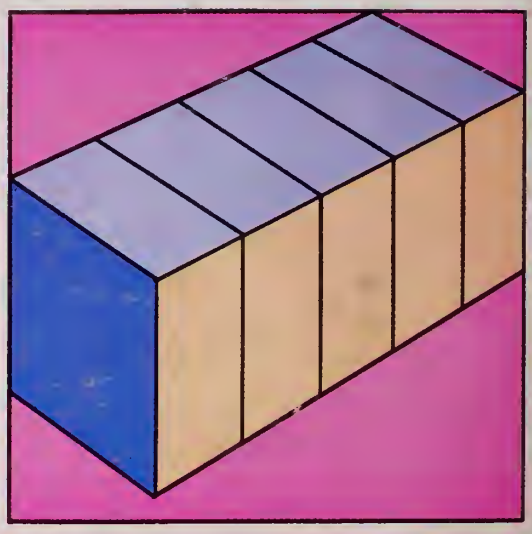
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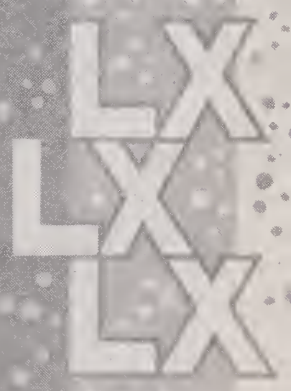
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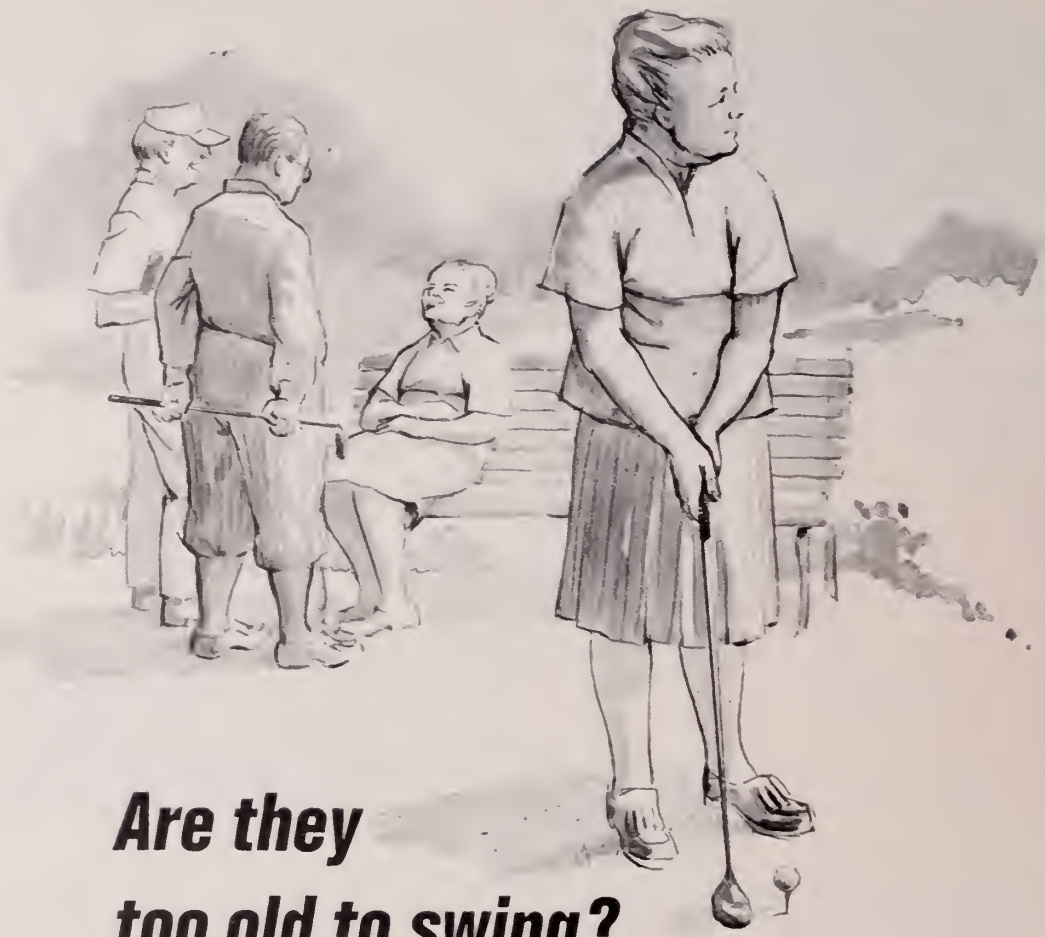
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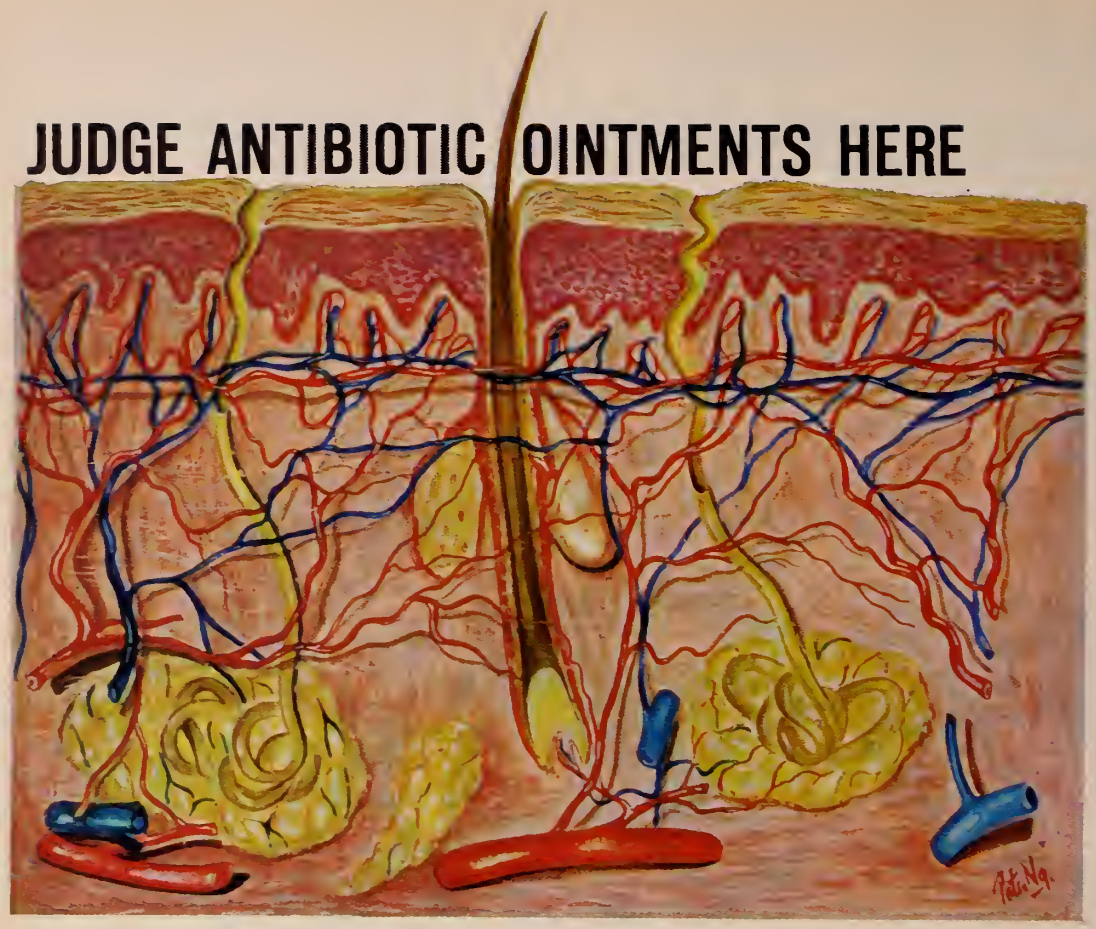
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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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Through the valleys of Hall, wrote
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Apalachicola River at Fort Gadsden near Sumatra. Photo courtesy Florida Park Service.

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Brief Summary of Prescribing Information– 9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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hydroflumethiazide, 50 mg./reserpine, 0.125 mg. protoveratrine A, 0.2 mg.

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When successive blood pressure readings confirm essential hypertension, consider Salutensin for:

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Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."* However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A® base.†

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Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.



*McClarin, W. M., and Knox, J. M.: Cutis 3:619 (June) 1967.

†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

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Are There Alternatives to Government Medicine?

Well, FMA has to break in a new President. It really shouldn't be too much trouble; Henry Babers has been whipping me into shape for the last year, and Henry wields a mean lash. We've really had only one point of conflict. In the interest of economy in our travels we two have on occasion roomed together. Henry talks in his sleep—but I can't understand him. He says I snore on both inspiration and expiration.

More seriously, many have strongly criticized the leadership of AMA and FMA for not having ready an alternative plan to Medicare and Medicaid. In reality, we were offered Hobson's choice: either H.E.W.'s plan for socialized medicine, or one of our own—but both must be government medicine. As long as Congress, and therefore supposedly the populace, believes that all defects in the private enterprise system must be solved by federal intervention, gradual but relentless governmental subsidy and control shall ensue—not just in medicine, but in all segments of our economy.

We had a plan: the private practice of medicine, with voluntary free care for the indigent, and voluntary prepaid health insurance. It had, and has, manifest faults, most of which are correctible within the overall plan. In spite of loaded and fallacious statistics to the contrary, it is probably the best plan for medical care yet devised. This plan was rejected on the assumption—usually fallacious—that federal intervention would solve all problems. Now we are faced with the spectre of a vast extension of the socialization of medicine.

We have four alternatives: we may bow to the supposedly inevitable; we may attempt to modify the proposed extensions to make them less noxious, a temporary expedient at best; we may offer alternative but still socialistic schemes of medical care; finally, and most difficult, we may attempt to convince the American public and Congress that federal intervention is not the sole solution to problems; that we as a nation still believe in a system of free enterprise; that we as a people do not desire dependence on the state from the cradle to the grave, and that the socialization of medicine is only one step in the socialization of a nation.

Criticism of the AMA in this instance is silly. Any private enterprise plan was doomed to rejection; any national scheme was anathema to most doctors. And now, unless we can somehow succeed in the last-named alternative, the current socialistic philosophy will inexorably lead to a socialistic conclusion.

James T. Cobb, Jr., M.D.

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Precautions: As with other thyroid preparations, an ove may cause diarrhea or cramps, nervousness, tremors, tach vomiting and continued weight loss. These effects may be four or five days or may not become apparent for one to thre Patients receiving the drug should be observed closely for thyrotoxicosis. If indications of overdosage appear, dis medication for 2-6 days, then resume at a lower dosage patients with diabetes mellitus, careful observations should for changes in insulin or other antidiabetic drug dosage ments. If hypothyroidism is accompanied by adrenal insuffic Addison's Disease (chronic subcortical insufficiency), Sim Disease (panhypopituitarism) or Cushing's syndrome (hyp alism), these dysfunctions must be corrected prior to an SYNTHROID (sodium levothyroxine) administration. T should be administered with caution to patients with cardio disease; development of chest pains or other aggravation diovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarc

Side effects: The effects of SYNTHROID (sodium levoth therapy are slow in being manifested. Side effects, when occur, are secondary to increased rates of body metabolism ing, heart palpitations with or without pain, leg cramps, an loss. Diarrhea, vomiting, and nervousness have also been o Myxedematous patients with heart disease have died fron increases in dosage of thyroid drugs. Careful observatio patient during the beginning of any thyroid therapy will physician to any untoward effects.

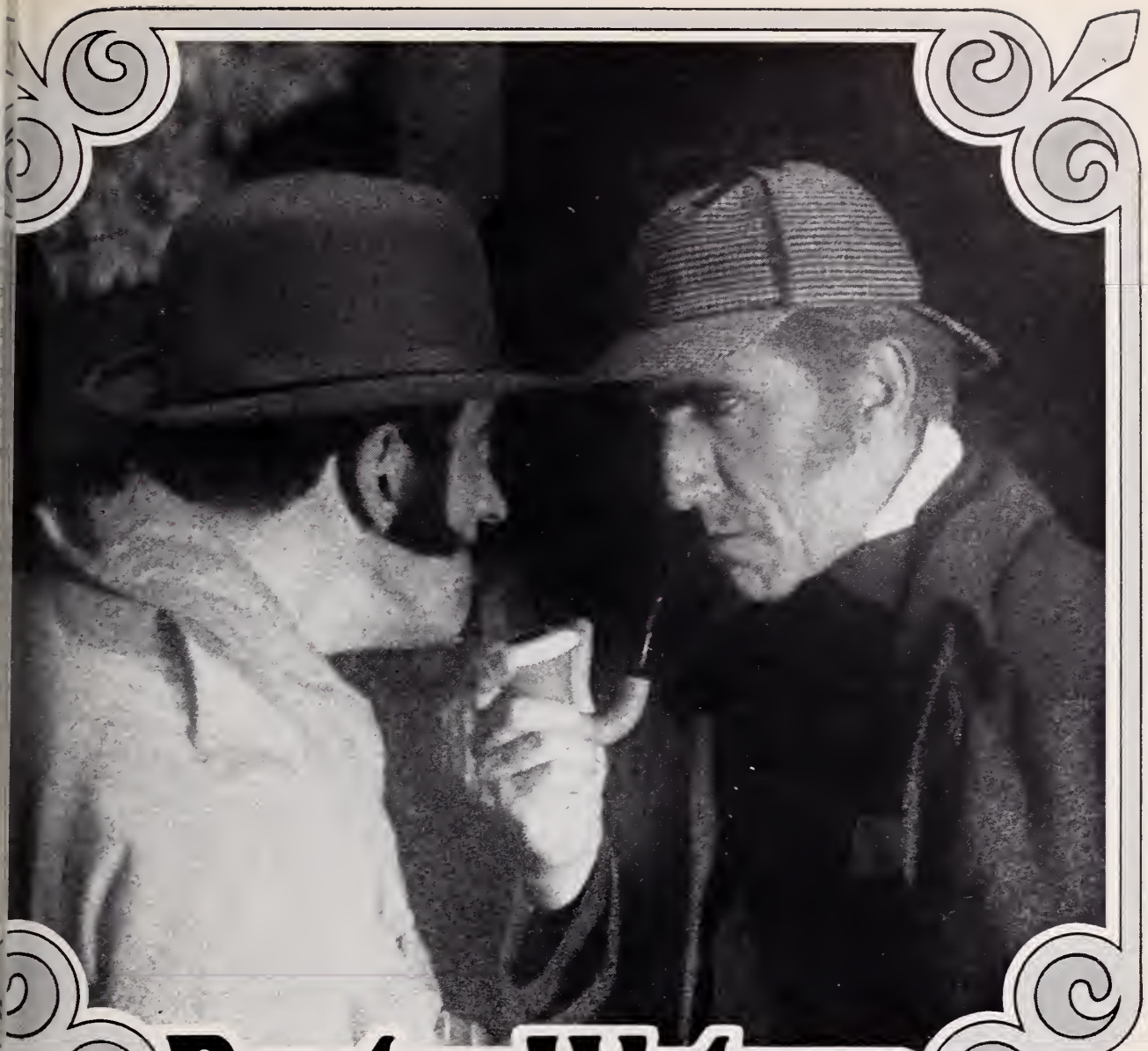
In most cases with side effects, a reduction in dosage foll a more gradual adjustment upward will result in a more indication of the patient's dosage requirements without the ance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYN (sodium levothyroxine) TABLET is equivalent to approxima grain thyroid, U.S.P. Administer SYNTHROID tablets as daily dose, preferably after breakfast. In hypothyroidism myxedema, the usual initial adult dose is 0.1 mg. daily, anc increased by 0.1 mg. every 30 days until proper metabolic ba attained. Clinical evaluation should be made monthly measurements about every 90 days. Final maintenance dos usually range from 0.2-0.4 mg. daily. In adult myxedema, dose should be 0.025 mg. daily. The dose may be increase mg. after two weeks and to 0.1 mg. at the end of a second tw The daily dose may be further increased at two-month inte 0.1 mg. until the optimum maintenance dose is reached (0. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.5 mg., scored and color-coded, in bottles of 100 and 5 tion: 500 mcg. lyophilized active ingredient and 10 mg. of M N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Injection, U.S.P., as a diluent.

SYNTHROID (sodium levothyroxine) INJECTION may be tered intravenously utilizing 200-400 mcg. of a solution co 100 mcg. per ml. If significant improvement is not shown th ing day, a repeat injection of 100-200 mcg. may be given.

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Doctor Watson xposes a double agent

n the Embankment. Two figures emerge into silhouette against a d street lamp. The flare of a match reveals the profile of Sherlock es. As he lights his calabash, his companion speaks:

love, Holmes, that amazing intuition of yours has proved right . What we're looking for is a single entity. I thought we were ıg with several others—even twins. But now—I'd say we've vered a double agent."

me more, Watson, and be quick about it!"

son withdraws a folded paper from inside his greatcoat, and aloud from it):

key to the whole cypher is SYNTHROID (sodium levothy- ıe)"...

h! Watson, not so loud! You'll alert our quarry."

son continues): "A single entity that serves two functions."

ıaster stroke, Watson."

low along, Holmes. In the neighborhood of 95% of the circulat- ıyroid hormone is levothyroxine—T_4 as you call it. T_4 is bound yroxine-binding proteins in the serum. It becomes available only ually to tissue cells—as free thyroxine."

"Is that why there's such a smooth, predictable response, Watson?"

"Quite! With agent T_4, SYNTHROID, the chances of a precipitous rise in metabolic rate are lessened."

"But how does 'free' thyroxine fit into the picture?"

"Well, Holmes, you might call it the tissue thyroid hormone—because 'free' thyroxine (that is, thyroxine not bound to protein) is active at the tissue level. It is gradually released from thyroxine-binding proteins. Each daily dose of SYNTHROID is mostly bound to thyroid-binding proteins, and slowly released as 'free' thyroxine—the form in which it is metabolically active."

"Magnificent, Watson! So protein-bound thyroxine is the major form of circulating thyroid hormone, and it is released as 'free' thyroxine. And that's why SYNTHROID is able to simulate the normal process so artfully. Q.E.D."

"Not so fast, Holmes. SYNTHROID works for the *physician*, too. Because its dosage is more precisely controllable, and because response is so smooth and predictable, the *doctor* gets fewer phone calls in the wee hours from agitated patients. Both parties get more sleep!"

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...have a 30-year safety record?

...minimize side effect surprises?

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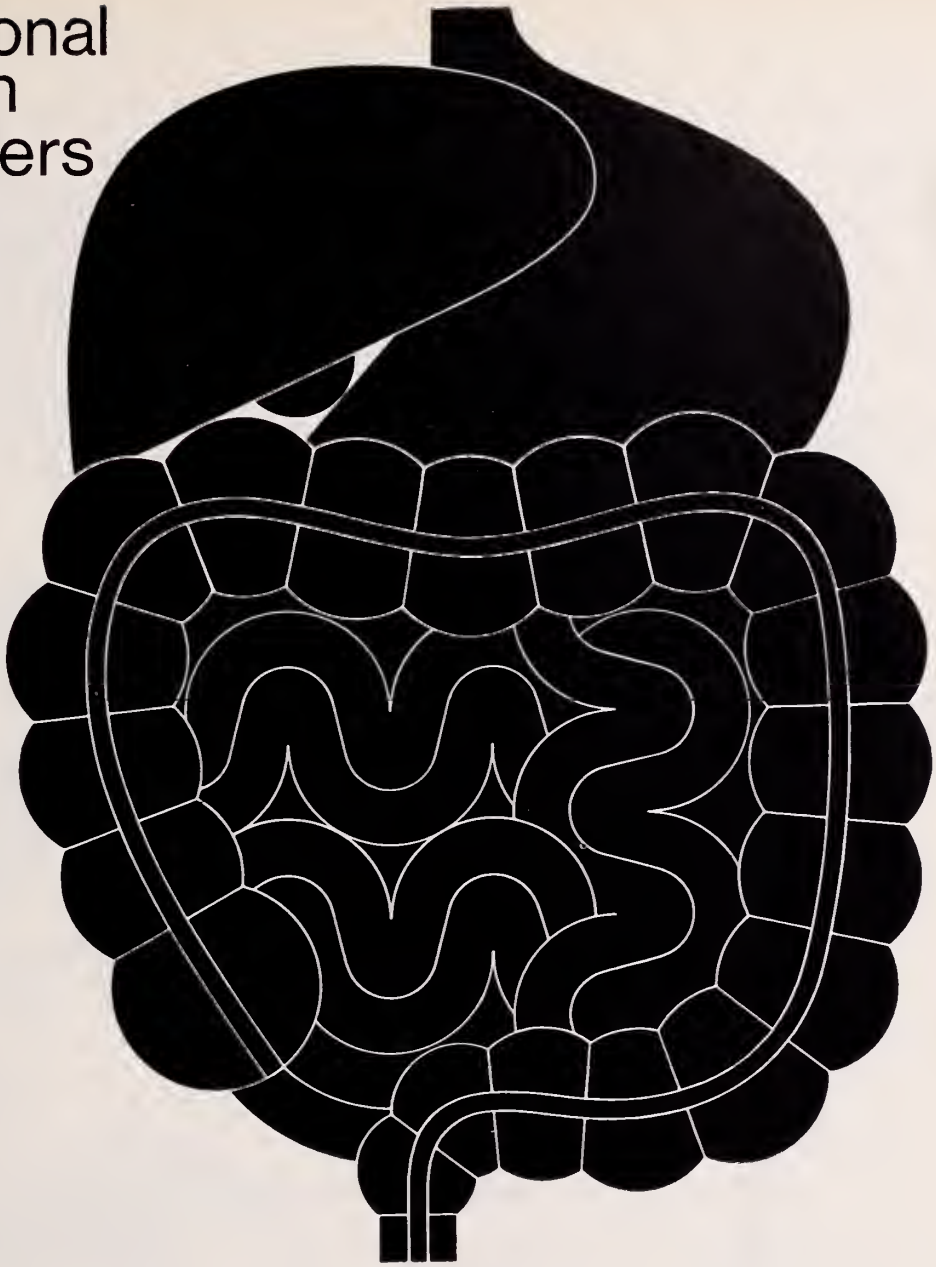
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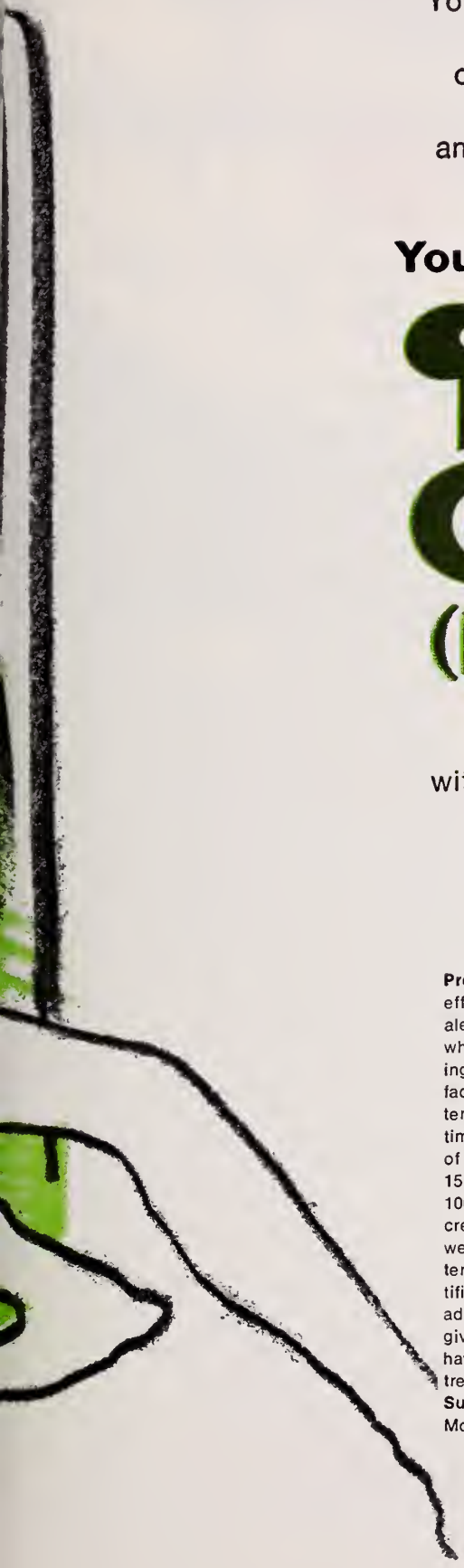
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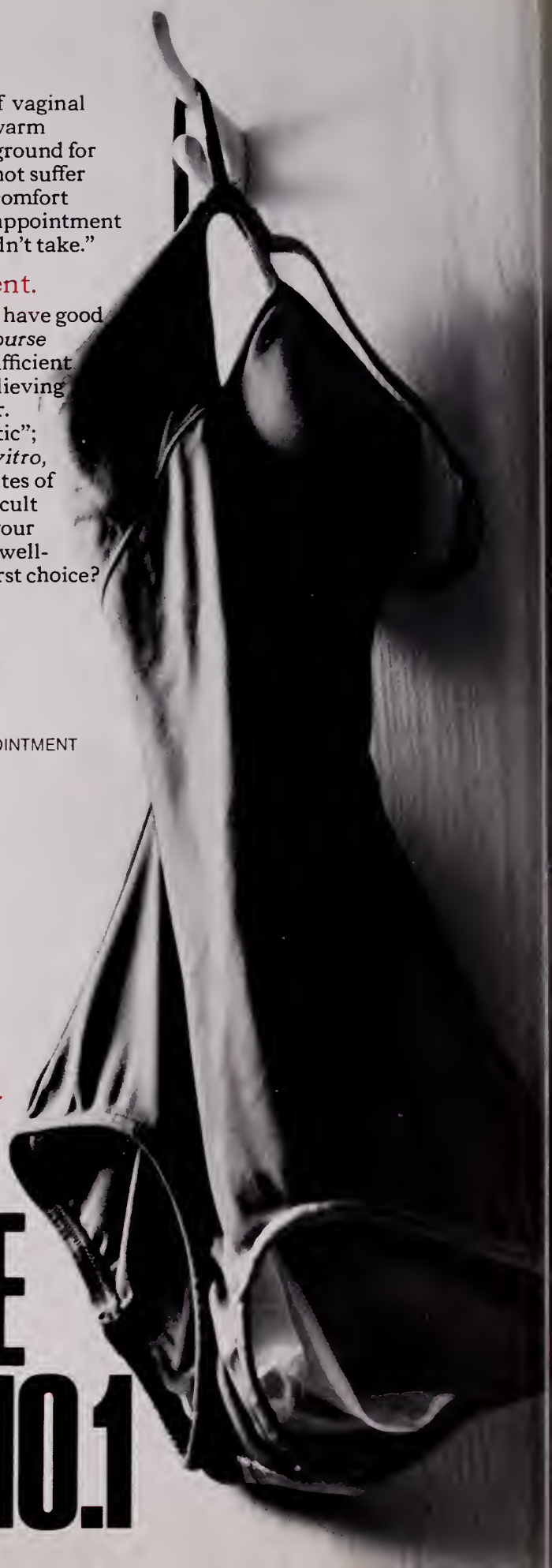
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L-Dopa Therapy in Parkinson's Disease

Melvin Greer, M. D.

Therapeutic advances in neurology have recently been highlighted by the use of L-Dopa in the treatment of Parkinson's disease. In this review an historical chemical summary provides the background information for the administration of the drug and offers an interpretation of the therapeutic results.

Central Nervous System Neurohormones

Many chemical mediators or neurohormones are known or presumed to be involved with neural impulse transmission. These include acetylcholine (ACH), gamma amino butyric acid (GABA), histamine, serotonin and the catecholamines, norepinephrine and dopamine. ACH is a simple straight chain aliphatic compound which is considered to be the major agent concerned with central excitatory impulses. Neurophysiological studies indicate that such impulses are decreased by the application of GABA; however, this naturally occurring CNS compound may not be necessarily the major centrally-acting inhibitory agent. The beneficial responses seen in Parkinson's disease patients after treatment with the anticholinergic drugs suggests that there is a chemical imbalance in this disease in which motor excitatory impulses are not modified by motor inhibitory impulses from the basal ganglia. Other experiments imputing disturbance in the presumed inhibitory role of the basal ganglia over excitatory motor activity include the observation that Tremorine, a drug known to induce tremor in the experimental animal, increased the cerebral concentration of ACH concomitant with the appearance of this dyskinetic movement disorder.[1] Furthermore, the administration of atropine, an anticholinergic drug, could significantly decrease the clinical response as well as lower ACH production.

The role of catecholamine compounds in the transmission of autonomic nervous system impulses is recognized by the clinician who is acquainted with the hypertensive and gastrointestinal reactions associated with the release of these substances by tumors of neural crest origin, pheochromocytoma and neuroblastoma.[2] In the central nervous system norepinephrine is found in high concentrations in those anatomical portions of the brain related to autonomic neural function. In the hypothalamus, there exists greater than ten times the amount found in the cortex.[3] Dopamine, the other major catecholamine fraction found in the CNS, has a unique distribution as well; this compound occurs in high concentrations in the corpus striatum. In the caudate nucleus, for example, the concentration of this compound is more than 50 times greater than the cortex per gram of tissue.[3]

The hypothesis exists that dopamine, the major neurohormone involved in the extrapyramidal motor system, functions as a modifier or inhibitor of motor activity.

Dopamine Metabolism in Parkinson's Disease

Knowledge of neuroanatomical relationships, presumed central neurophysiological motor balance mechanisms, and the hypotheses created from neurochemical and neuropharmacological data was then applied to the neurological disease. The report of decreased levels of dopamine in the corpus striatum of patients dying from Parkinson's disease was a critical beginning.[4] Subsequent papers substantiated this finding in addition to demonstrating that decreased levels of dopamine were found only in the contralateral corpus striatum of patients with unilateral Parkinson's disease.[5]

Formaldehyde vapor histochemical staining techniques offered a correlation between the neuropathological and the chemical findings in this disease.[6] Normally a dopamine fluorescent pathway is detected between the substantia nigra and the corpus striatum by this unique tool. Animal experiments involving stereotactic procedures demonstrated that destruction of the substantia

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nigra led to a loss of dopamine fluorescent staining in the corpus striatum.[7] This would imply a similar disruption of the pathway and depletion of dopamine in the basal ganglia in Parkinson's disease were the substantia nigra altered. Of course, it still does not answer the question pertaining to the etiology or pathogenesis of substantia nigra malfunction.

Other indirect studies designed to assess the nature of dopamine metabolism in Parkinson's disease were contradictory in elucidating the role of this catecholamine. The urinary excretion of dopamine in these patients was said to be reduced by some authors,[8] while others found that the excretion of dopamine metabolites was normal in comparison with control groups.[9] Since only 2% of the body's dopamine concentration is found in the brain a general malfunction of the metabolism of this amine would have to exist to perceive an altered urinary excretion of the compound or its metabolites. Indeed, such may be the case in patients suffering from the so-called Shy-Drager syndrome, a variant of Parkinson's disease characterized by a dyskinetic motor disorder in which hypotension and other signs of sympathetic neural dysfunction exist.[10]

Nevertheless, other pharmacological data supported the concept of impaired catecholamine activity as a significant factor related to Parkinson's disease. Reserpine, an agent which depletes the brain stores of dopamine, as well as other psychopharmacologic tranquilizer drugs in the promazine family which alter the CNS intracellular metabolism of catecholamines cause the symptoms of Parkinson's disease when administered in high dosage.[11] Elimination of these drugs or lowering the dosage most often results in the disappearance of these symptoms. Treatment with anticholinergic drugs improves the motor disability and allows continued tranquilizer therapy, if warranted. Moreover, the dystonic reaction occasionally seen within one to two days after institution of promazine drugs can be dramatically reversed by the intravenous administration of one of the anticholinergic drugs. Dihydroxyphenylalanine (DOPA), the metabolic precursor of dopamine, effectively reverses the reserpine motor response.[12] The irreversible side effects of akathisia or continued involuntary movements of the extremities and mouth seen in the elderly after the chronic administration of such drugs has been resistant to all forms of anticholinergic or antihistamine therapy.

Measurements of other relevant biochemical compounds in the extrapyramidal regions of the Parkinson's brain revealed no alteration in the content of dopa decarboxylase and monoamine oxidase, two critical enzymes concerned with the formation and degradation of dopamine. The basal ganglia concentration of homovanillic acid, the major terminal metabolite of dopamine, was subnormal in Parkinson's brains; however, the ratio of homovanillic acid to dopamine was higher than in other patients, implying that dopamine is adequately metabolized in situ.[13]

Drug Treatment of Parkinson's Disease

The pathological findings in Parkinson's disease, the most common of the degenerative diseases affecting the extrapyramidal motor system, have never satisfactorily explained the clinical features exhibited by the patient to a greater or lesser degree during life: tremor, rigidity, and bradykinesia. In many instances a loss of pigment (melanin) and general neuronal change in the substantia nigra may be seen; however, this is not a consistent finding. The brain of the post-encephalitic Parkinson's disease patient is more likely to demonstrate this loss of melanin whereas the classical or idiopathic Parkinson's disease brain may manifest minor cellular alteration in the basal ganglia, having no correlation with the clinical findings which may have been equally as severe. Grave doubt is cast upon the so-called arteriosclerotic form of Parkinson's disease as being an entity distinguishable from the classical type. An unusual variant of this illness is the Parkinson-Dementia Complex described as an endemic illness in Guam.[14] Here, in addition to the motor impairment the patient exhibits progressive mental deterioration. The neuropathological findings in this illness have included features typical of Alzheimer's disease.[15]

To all intents and purposes, treatment of Parkinson's disease had been based on empiric observations beginning with the response noted after the administration of the belladonna alkaloids. Refinement of this basic agent led to the development of more expensive, although not necessarily more efficacious drugs, the anticholinergic compounds. Among these agents commonly given to patients include Artane,® Pagitane® and Akineton.® By and large the salutory effect has been a reduction of rigidity as the major response to treatment with these agents.

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Another class of drugs is the antihistamines including Benadryl® and Disipal,® which seem to offer benefit to the patient with tremor. No drug appears to alter the bradykinesia significantly. Combinations of both the anticholinergic and antihistamine drugs are commonly employed in modern practice in varying doses depending upon the patients' tolerance. Dryness of the mouth, blurred vision, confusional states and urinary retention in the male patient are signs of anticholinergic overdosage to be considered. Likewise some element of sleepiness may be apparent with increasing doses of the antihistamines. Both "psychic energizers" including the amphetamines, as well as the antidepressants such as Tofranil,® have been given to effect a specific improvement in motor action as well as to combat the depression and stimulate the patient who is aware that he has an illness which is progressive and incurable. Other drugs which have been administered to patients with variable claims of success include the non-halogenated phenothiazines including Parsidol® and Pacatal,® and muscle relaxants such as Myanesin.®[16] The observation of the "tremor-potentiating effect" of adrenalin also led to the use of Propranalol, a beta-receptor antagonist which was thought not to be of value in the treatment of Parkinson's disease.[17]

More recently amantadine-HCl, administered to a Parkinson's disease patient because of a flu-like illness, was reported to be of benefit in modifying the dyskinesia. Although the paper reporting a favorable response on a group of patients treated with this drug was initially received with enthusiasm the positive results were not as long lasting nor as successful as was originally claimed.[18] The similarity of this drug's chemical structure to that of atropine implies that its effect may be achieved in the manner similar to anticholinergic agents.[18]

From 1960 clinical trials with Dopa in the treatment of Parkinson's disease were only partially successful if at all. [4,5,12,13] Dopamine, presumed to be the functional neurohormone, could not be administered since its passage through the blood-brain-barrier is impeded; therefore its precursor, Dopa, was given intravenously as well as orally. The D-isomer was potentially hepatotoxic, hematotoxic and felt to be of no value. L-Dopa initially resulted in only transient improvement when given orally.[19]

Subsequent studies proved the efficacy of this drug when given in large doses over a prolonged period.[20,21] The remarkable improvement in patients to whom as much as 16 Gm. was administered orally provided the impetus for additional clinical investigative work in the field. Double blind studies confirmed these observations[22,23] and clinical investigations are underway currently in many institutions to assess the efficacy of L-Dopa as conditional requirements prior to its approval by the Food and Drug Administration. Among the most important findings is the fact that the clinical benefits achieved are said to have persisted as long as the drug was administered, in one series of patients up to two years.[21] The implication is that an agent is now available which not only can offer immediate benefit to the patient but can prevent the progression of the illness.

In our institutions 100 patients, ranging in age from 42 to 78 years, have undergone continuous daily treatment since January, 1969. We confirm the experience of others who acknowledge a moderate to marked improvement in approximately 40% and a slight to moderate improvement in an additional 40%. The drug was given as well to those who had undergone thalamotomy and the improvement ratio was identical compared to those not having surgery. The only restrictions were that the drug could not be administered to women in the child-bearing age or to patients with other serious medical illnesses, wide angle glaucoma, dementia or psychoses. Certain drugs such as sympathomimetic amines, antihypertensives, barbiturates or psychoactive drugs were to be avoided or used with extreme caution. Previously administered anticholinergic and antihistamine drugs could be continued. Certain patients appreciated the withdrawal of these latter drugs because they were thought to be deleterious rather than beneficial. Others felt that these additional drugs helped. In either event the use of L-Dopa was definitely superior.

Our schedule calls for a loading dose of 250 mg. four times daily with increments of 0.5 Gm. every two to three days to a maximum of 8.0 Gm. daily. Experience has taught us that the aged, the chronically debilitated and the patient whose illness has extended for more than five years may be unable to tolerate either the speed of dosage increase or the maximum allowable dose. In those who could tolerate the schedule a subjective improvement described as a "loosening" was described after seven to ten days. To the observer this was interpreted as a lessening of the brady-

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kinesia; the patient was able to move spontaneously with less effort in arising from a chair, in rolling over in bed, in turning while walking and in climbing stairs. Lessened rigidity, as gauged by resistance to passive extremity, trunk and neck movement, was evident concomitantly or within three or four days later. Tremor was likewise improved at the same time. However, the degree of improvement was not as significant with respect to tremor as it was in regard to rigidity and bradykinesia. Most patients achieved maximum improvement in their symptomatology within four to six weeks after the start of treatment and maintained their dosage level between 3 and 5 Gm. daily. In approximately half the patients over 70 or those who were seriously handicapped, a significant initial improvement was followed by a disappointing regression after two months or so. Raising or lowering the dosage offered no improvement. In general, patients who were only mildly affected exhibited marked improvement whereas of those significantly affected less than half the patients demonstrated moderate to marked improvement. This is consistent with the reports from others.[24]

The side effects of nausea, vomiting and anorexia prevented many patients from increasing their total L-Dopa intake. Often the ingestion of food with the capsule relieved some of the untoward reactions; however, this could not always be achieved. Anti-nausea medication offered little. In these patients increments of an additional 250 mg. every four to five days was the maximum tolerated. Mental changes including states of confusion and disorientation particularly in the elderly and marked agitation in all age groups were also evident during treatment. Lowering the dose improved the condition although, in three patients, even the administration of anti-anxiety medication (Librium®) did not allow us to administer as little as 100 mg. daily without causing this reaction.

During the phase of drug administration, when maximum improvement was acknowledged by the patient, his family and the observer, other side effects were reported. The male patient exhibited sexual desires which had been dormant for years. Two male patients over 50 experienced erections which they stated they could not achieve since the onset of Parkinson's disease five to ten years previously. Others described a restlessness, an almost involuntary desire to do things in a more active manner, and a garrulousness which was disturbing to themselves as well as others. Psychological reactions of an aggressive variety were also reported in which the patient's family would describe the patient as being intolerant of others' behavior, hostile and abusive in language and action. In most instances it was acknowledged that this behavior had been evident to a lesser extent during the patient's premorbid life.

After an average of two to three months of therapy other dyskinetic phenomena appeared in the majority of our patients who received 5 Gm. or greater daily. Chewing movements of the tongue, dystonia of the neck, choreiform movements and muscle spasm in the extremities and continuous shuffling movements of the legs were interpreted as being evidence of Dopa overdosage. In one patient who had previously undergone a thalamotomy ipsilateral dystonic movements of the extremities was evident. Lowering the drug dosage improved these reactions; however, there was some regression in the salutory motor effects witnessed previously. The administration of pyridoxine, a coenzyme important in the metabolic pathways of Dopa, was ineffective.[25] Coincident treatment with anticholinergics, thought by some to have a synergistic effect, was of no value in altering the acquired dyskinesia. Antihistamines were likewise of no definite benefit. The reinstitution of Dopa at the previous level caused a return of these undesirable movements which significantly voided some of the beneficial responses described initially. This frustrating experience was, again, most evident in the elderly or the patient who was significantly disabled. Occasionally the gradual increase in L-Dopa permitted the patient to achieve a positive motor response while avoiding the overdose dyskinesia. In others the chewing movement spontaneously disappeared without altering total dosage. Other side effects which caused our patients some concern included postural hypotension, treated by elastic stockings, and cardiac arrhythmias. These reactions have contributed to secondary medical problems in other patient series.[22,23] Another interesting observation was the occasional urinary excretion of homogentisic acid by some patients. Reassurance that this represented a normal metabolic reaction in their body prevented an extensive urological investigation for hematuria. Excretion of this compound in the sweat has also been noted.

Monitoring vital organ function was achieved by means of weekly, then monthly, hemograms, urinalyses, blood urea nitrogen, liver function tests, and electrocardiograms. Other tests included blood sugar determinations, thyroid function

studies and Coombs test. No significant abnormalities were detected in our series of patients.

Prognosis

As with other drugs whose purpose is to alter the metabolic state of the body by replacing a deficiency, variation in clinical response is not unexpected. Whether the benefits derived in the treatment of Parkinson's disease with L-Dopa persist indefinitely remains to be seen. The need for high levels of Dopa to achieve the effect has led to animal experiments with dopa decarboxylase enzyme inhibitors such as N-(DL-seryl)-N^1 (2,3,4-trihydroxybenzyl) hydrazine which increases the endogenous level of Dopa.[25,26,27] The untoward effects of high doses of Dopa, such as its presumed effect on the vomiting center of the brain,[28] may be avoided by the concomitant use of such enzyme inhibitors which would permit administration of lower doses of L-Dopa to achieve high cerebral dopa-levels and a positive motor response.

The possibility that other compounds derived from the metabolic degradation of dopamine may play an important neurotransmitter role offers new directions for investigation. Dopa has been administered to patients with other types of dyskinetic movement disorders such as dystonia musculorum deformans,[29] progressive supranuclear palsy and hereditary tremor without beneficial effect. One concept implies that rather than a deficiency state, there exists an imbalance in favor of higher concentrations of dopamine in certain diseases of basal ganglia origin such as Huntington's chorea.[21] Here the therapeutic effect is to be achieved by decreasing intracerebral dopamine with the use of reserpine-like agents or drugs which inhibit the cerebral decarboxylation of Dopa to dopamine. Favorable response to such drug administration has not been confirmed by others including work performed at our institutions.

Mental changes noted also have led to the use of Dopa in the treatment of depression and the initial response from investigators has been favorable.[30]

If one were to make an analogy with the results of insulin therapy in the diabetic, the use of Dopa in the treatment of Parkinson's disease offers rewards that are certainly of direct clinical benefit but also provide the key for pursuing vital answers to the chemical questions underlying neural function. So, too, with insulin and diabetes mellitus, the exact pathogenesis of Parkinson's disease remains an enigma but the prognosis is altered dramatically.

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The Treatment of Parkinsonism With L-Dopa and Amantadine

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Paralysis agitans, first described by James Parkinson in 1817, is a symptom complex due to widespread lesions in the basal ganglia and cerebral cortex. It is characterized clinically by a variety of signs, chiefly, mask-like facies, dysarthria, alternating tremors, stooped posture, abnormalities of the gait, cogwheel rigidity of the muscles, slowness and poverty of movement, diminution of associated movements and symptoms of dysfunction of the autonomic nervous system.[1]

Much interest has been generated in the treatment of Parkinsonism by Cotzias, et al, who reported in 1967 complete, sustained, disappearance or marked amelioration of the manifestations of Parkinsonism in a small series of patients treated with 4 to 16 Gm. of L-Dopa.[2] This was further corroborated by Cotzias, et al, in a later paper in which the entire (larger) series of patients treated with L-Dopa improved.[3] Schwab, reporting in May 1969 on the use of amantadine in the treatment of Parkinson's disease,[4] suggested that it could also be used in the treatment of Parkinsonism.

This study was undertaken to evaluate, by objective means, the response to L-Dopa in Parkinsonian patients. Later in the study, amantadine was added to the L-Dopa when maximum doses were achieved in a number of patients.

Materials and Methods

The ages of the 23 selected patients in this study varied from 50 to 77, and the duration of symptoms ranged from six months to 42 years.

Five constructional tests were designed as an objective means of testing the patients' response to medication. The tests were varied in their administration on a once-per-day to once-per-week basis to minimize the "practice effect." Tests were administered in serial fashion, beginning with the copying of a cross, triangle and circle. The patient was then requested to write "This is a beautiful day" in his usual hand and at the bottom of the page. The second test consisted of diagonally intersecting the page with two lines, drawn with the right hand. The third and fourth tests were, respectively, bisecting the page with right and then left hand. The fifth test consisted of the standard instructions for the "Goodenough Draw-A-Person Test."[5] The patient used the No. 2 standard lead pencil and a piece of blank, white 8½ x 11 typing paper (Figs. 1, 2, 3a, 3b, 4a, 4b).

The "Goodenough Draw-A-Person Test" was thought to be of particular value because of inferential evidence suggesting that this was not only a measurement of the patient's ability to overcome tremor, slowness, and poverty of movements, and interference with voluntary movements but, in addition, it could also be used as a measurement of the individual's personality and adjustment.[6]

Medical Evaluation

Each patient underwent a complete general medical and neurological examination. Routine laboratory studies included CBC urinalysis, prothrombin time, calcium, phosphorus, glucose, BUN, uric acid, cholesterol, total protein, albumen, total bilirubin, alkaline phosphatase, LDH and SGOT. In addition, EKG's and EEG's were obtained along with skull and chest x-rays. These studies were repeated on several occasions, prior to and during treatment with L-Dopa and later treatment with L-Dopa and amantadine in combination.

Administration of Medication

The dosage schedule of 250 mg. daily increments of L-Dopa was begun and increased until the dose of 3 to 7 Gm. was reached by the end of the third hospital week. Amantadine, a relatively new prophylactic agent for influenza,[10,18] was added when the maximal effect of L-Dopa was apparently achieved in a number of the patients.

Results

Each of the major manifestations of Parkinsonism was graded on a 0-4 plus basis: 4 being severe, 3 moderate, 2 mild, 1 present, 0 absent. These included: tremor, rigidity, bradykinesia (mainly manifested as gait disturbance and inter-

ference with voluntary movements), and bradyphrenia (slowness of thought and formation of ideational material). Table 1 depicts the results before and after treatment with L-Dopa and the effect of amantadine where it was used. In addition, results as to the effectiveness in the improvement of drawings are also listed.

Review of results showed that after treatment 21 of the 23 patients were clearly improved. Later losses, including three who refused to continue in the study and one who died, reduced the total number of improved patients to 17 out of 23. These are the patients treated initially with L-Dopa. Of the patients treated with amantadine in addition to L-Dopa, clear-cut clinical improvements relating to this compound were noted. In five patients, further improvement could not be clearly related to addition of amantadine but was suspected subjectively.

Improvement in constructional tests occurred in 13 of the 23 patients who received L-Dopa. These improvements primarily manifested themselves in improved handwriting and self-image. Significantly, five of the 13 patients added hands to self-figures that initially had no hands.

Serious complications were noted in two of the 23 patients. The serious side effects included the sudden demise of one patient (No. 9) who continually lost weight after three months on the medication. Although autopsy confirmation was not available, pulmonary embolus was suspected. Another patient (No. 5) experienced profuse diaphoresis requiring IV replacement therapy for a three-day period. Initial management included discontinuation of L-Dopa and administration of pyridoxine.

Several patients (Nos. 2, 5, 7, 13, 15, 17) experienced an induced form of tremor which was primarily noted at the intermediate joints rather than the usual "distal" tremor of Parkinsonism. This was easily controlled in all cases by a reduction of medication.

Relatively minor side effects were almost universal nausea and some vomiting with rapidly increasing doses of medication. This was easily managed by a lower dose schedule and a longer period of induction. Two patients, however, (No. 7, 15) stopped L-Dopa because of continued G.I. upset.

Dyskinetic and dystonic facial movements occurred in several patients (Nos. 5, 7, 13, 17). This was controlled in most instances by reduction of dosage. Orthostatic hypotension was a problem in only one patient in the series (No. 18). Prophylactic use of elastic stockings was instituted in all patients and further difficulties were not experienced.

Insomnia was a frequent occurrence. In one patient (No. 6), the severity of this symptom required almost total administration of the medicine at night. This paradoxically relieved the insomnia. He did, however, later discontinue use of L-Dopa because of emotional lability.

Therapeutic Effects

Above and beyond the marked improvement of rigidity in bradykinesia was the clear-cut improvement in bradyphrenia. Of a long-term analysis, this was the single item noted by the patient's family and physician to be clearly helped in almost every single patient treated with L-Dopa. Seventeen of the 23 patients were improved.

Discussion

It is suggested by the results presented herein that the major beneficial effects of L-Dopa therapy in the treatment of Parkinsonism lie in the realm of "bradyphrenia," marked psychomotor retardation noted in Parkinsonism. This, indeed, clearly extends to the realm of the "formulation and expression of the patient's thought." Although admittedly a subjective analysis, the most marked and consistent effect of L-Dopa was to increase the speed and clarity of the patient's communication skills. As reported by Godwin,[19] et al, patients and their families all reported subjective decrease in their "disability."

Effectiveness of amantadine was judged to be slight in this study. Adequate controls, however, were not instituted to clearly delineate the effectiveness, or relative ineffectiveness, of this preparation in combination with L-Dopa. As suggested in the *Journal of the American Medical Association* editorial of May 19, 1969,[20] the action of amantadine may well be synergistic with L-Dopa. Five patients seemingly improved; whether or not it was due to increasing L-Dopa effect or the addition of amantadine could not be clearly determined.

It is also suggested from the results presented that constructional tests, at least in the manner used in this setting, were inadequate to clearly evaluate patients' total progress towards sociological recovery. It is suggested, however, that more finite tests of communicative skills might more clearly reflect improvement in this realm.

TABLE 1.—SYMPTOMS

PATIENT	SEX	AGE	DURATION	CLINICAL EXAMINATION PRIOR TO RX	CLINICAL EXAMINATION AFTER L-DOPA	CONSTRUCTIONAL TASKS	AMANTADINE*
1.	M	66	20	Tremor: 2 Rigidity: 2 Bradykinesia: 2 Bradyphrenia: 2	1 0 0 0	Improved self image	Has not missed it
2.	M	60	42	Tremor: 3 Rigidity: 2 Bradykinesia: 2 Bradyphrenia: 1	1 0 0 0	Improved clearly	Has not missed it
3.	M	51	10	Tremor: 0 Rigidity: 1 Bradykinesia: 3 Bradyphrenia: 1	0 0 1 0	No change	Not used
4.	M	56	6	Tremor: 3+ Rigidity: 0 Bradykinesia: 1 Bradyphrenia: 0	2+ 0 0 0	Handwriting improved also	No effect
5.	F	58	10	Tremor: 3 Rigidity: 3 Bradykinesia: 4 Bradyphrenia: 2	2 2 2 1	Marked improvement	Possibly of some help
6.	M	50	3	Tremor: 3 Rigidity: 2 Bradykinesia: 2 Bradyphrenia: 2	2 1 1 1	No change	No effect
7.	F	57	7	Tremor: 1 Rigidity: 3 Bradykinesia: 3 Bradyphrenia: 2	0 1 0 1	Added hands	Of slight benefit
8.	M	56	2	Tremor: 0 Rigidity: 2 Bradykinesia: 1 Bradyphrenia: 1	0 1 0 0	No change	Of slight benefit
9.	F	64	4	Tremor: 1 Rigidity: 4 Bradykinesia: 4 Bradyphrenia: 3	1 2 3 2	Improvement; Added hands	Definite effect
10.	M	62	6 mos.	Tremor: 0 Rigidity: 2 Bradykinesia: 3 Bradyphrenia: 2	0 1 1 1	No change	Initially beneficial; After D/C, not missed
11.	F	68	34	Tremor: 4 Rigidity: 1 Bradykinesia: 2 Bradyphrenia: 2	1 0 0 1	No real change	Definite improvement
12.	M	69	21	Tremor: 3 Rigidity: 1 Bradykinesia: 0 Bradyphrenia: 1	1 0 0 0	Poor cooperation, slight improvement	Doubtful
13.	F	71	6	Tremor: 3 Rigidity: 3 Bradykinesia: 4 Bradyphrenia: 1	1 1 2 1	Improved clearly	Some effect?
14.	M	71	40	Tremor: 4 Rigidity: 1 Bradykinesia: 1 Bradyphrenia: 1	4 1 1 1	No change	Not tested

*Comment of Patient after withdrawal of drug

15.	F	65	20	Tremor: 3 Rigidity: 3 Bradykinesia: 3 Bradyphrenia: 2	0 0 1 1	Improved, added hands	Not tested
16.	M	67	2	Tremor: 0 Rigidity: 1 Bradykinesia: 3 Bradyphrenia: 1	0 1 3 1	No change	Not used
17.	F	67	2	Tremor: 2 Rigidity: 4 Bradykinesia: 4 Bradyphrenia: 3	1 2 3 2	Improved	Of some effect
18.	M	77	4	Tremor: 2 Rigidity: 2 Bradykinesia: 2 Bradyphrenia: 2	1 1 1 1	No change	No effect
19.	M	69	4	Tremor: 1 Rigidity: 4 Bradykinesia: 3 Bradyphrenia: 3	1 2 2 2	Marked improvement with hands	No clear effect, Previously treated
20.	F	52	4	Tremor: 0 Rigidity: 1 Bradykinesia: 2 Bradyphrenia: 1	0 0 0 0	Unchanged	Not used
21.	M	71	6	Tremor: 2 Rigidity: 3 Bradykinesia: 3 Bradyphrenia: 3	2 2 2 2	Improved	No effect
22.	F	70	5	Tremor: 2 Rigidity: 2 Bradykinesia: 2 Bradyphrenia: 2	1 1 1 1	Improved, added hands	Used initially, Definite effect
23.	M	75	12	Tremor: 3 Rigidity: 2 Bradykinesia: 1 Bradyphrenia: 2	3 1 1 1	Slight improvement	Not used

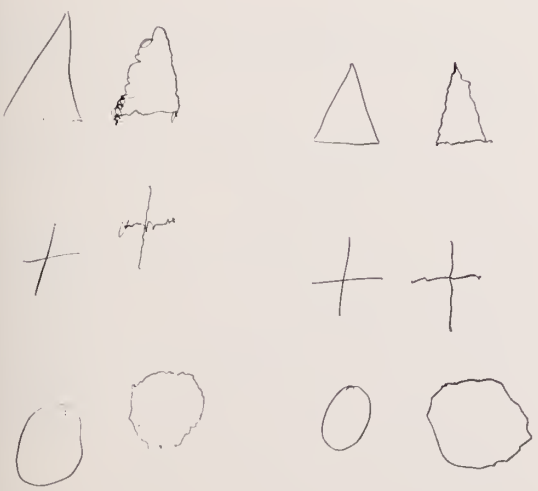


Fig. 1.—Before and after treatment.



Fig. 2.—Before and after treatment.



Fig. 3a.—Before and after treatment (right hand).

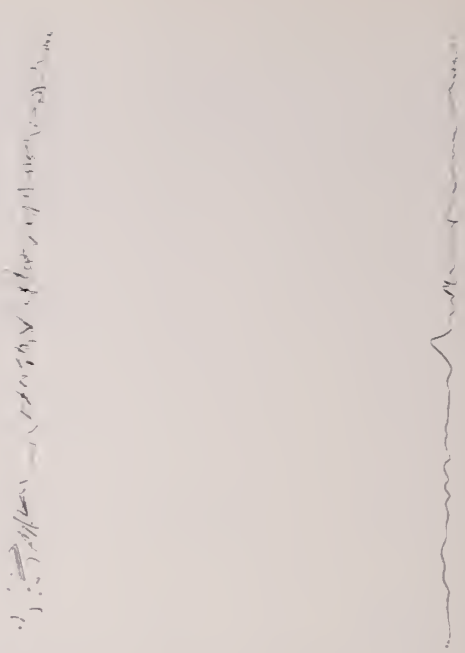


Fig. 3b.—Before and after treatment (left hand).

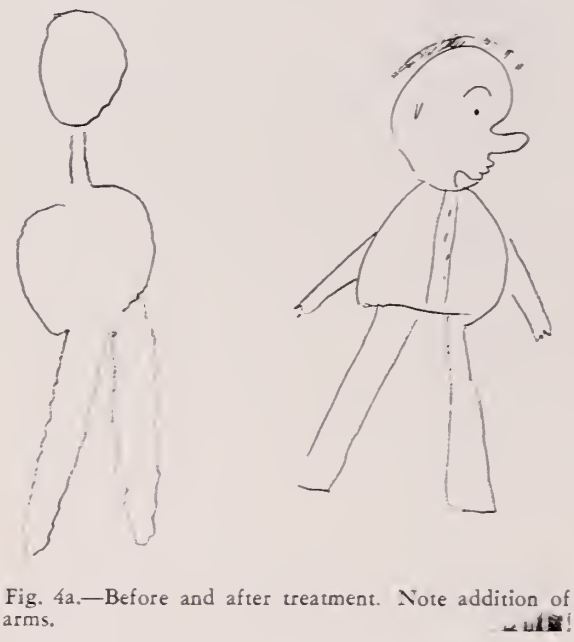


Fig. 4a.—Before and after treatment. Note addition of arms.



Fig. 4b.—Before and after treatment. Note addition of hands ten days later.

Summary and Conclusions

Clear improvement was shown in 17 of 23 patients treated with L-Dopa or L-Dopa and amantadine in combination. Addition of amantadine hydrochloride appeared to be of some definite benefit when added to the course of L-Dopa in only two of 16 patients treated with both agents.

Lack of adequate controls suggests, however, that further evaluation of the effectiveness of amantadine should be carried out.

Of the 23 patients treated with L-Dopa, two serious reactions, including one death, were experienced.

Constructional tests devised and used in this study were deemed an inadequate measurement of total patient improvement.

The single, most striking improvement noted in all patients was increased speed of thought and ability to communicate. It is suggested that bradyphrenia has been one of the least recognized and perhaps most limiting factors in Parkinsonism. It is further suggested that the major effect of L-Dopa is to reduce this one single sociological limiting impairment in these patients.

These results indicate that further investigation should be carried out in Parkinsonism and the chemotherapy thereof.

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Ecthyma Gangrenosum Complicating Pseudomonas Bacteremia

Rare Survival

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Pseudomonas aeruginosa bacteremia with severe hypotension and cutaneous lesions of ecthyma gangrenosum is almost always fatal.

This is a report of a rare instance of apparent survival from this syndrome.

Report of Case

The patient was a 72-year-old white man admitted to the hospital on September 18, 1965 after being found in the street disoriented as to time and place, confabulating and unable to stand. No history was obtainable.

The rectal temperature was 99 F., blood pressure 180/100 mm. Hg., pulse rate 88 per minute and respiratory rate 15 per minute.

There was no evidence of head trauma, and his neck was supple. There was bilateral impairment of ocular motility and nystagmus on lateral gaze. Funduscopic examination revealed narrowing of the arterioles. No bruits were heard over the carotid arteries.

The patient could neither count nor add and subtract. There was a coarse intention tremor of hand movements. He was unable to stand with eyes closed. Vibratory sense was absent in both ankles. Tendon reflexes were symmetrically hypoactive. The edge of the liver was palpable three centimeters below the right costal margin in the mid-clavicular line and the urinary bladder four centimeters over the pubic symphysis.

The remainder of the physical examination was unremarkable.

The laboratory reported hemoglobin 16.4 Gm.%; hematocrit 50%; white blood cell count 7,400; erythrocyte sedimentation rate 27 mm./hour (Westergren); blood urea nitrogen 19 mg.%; serum chloride 96 mEq./liter; sodium 140 mEq./liter; potassium 2.9 mEq./liter, and carbon dioxide 24 mEq./liter; serum bilirubin 1.11 mg.%; serum phosphorus 3.8 mg.%; alkaline phosphatase 2.6 Bodansky Units; SGOT 35 units/ml.; SGPT 15 units/ml.; total protein 4.7 Gm.%; plasma albumin 1.41 Gm.%, gamma globulin 1.05 Gm.%; urinalysis: white blood cells 5-6 and red blood cells 2-3 per high powered field, and urine protein 25 mg.%.

The clinical impression at time of admission was Wernicke-Korsakoff syndrome and urinary retention.

A lumbar spinal puncture was performed with an opening pressure of 215 mm. cerebrospinal fluid and a closing pressure of 200 mm. The spinal fluid was clear and colorless with a protein of 40 mg.% and a reactive VDRL.

Intravenous fluid, thiamine and multivitamin therapy was begun. A Foley catheter was inserted and 500 cc. urine obtained. There was no change in clinical status after 12 days of this treatment. On the 13th hospital day, he pulled out the catheter and was found completely unresponsive in bed. The blood pressure was 80/40 mm.Hg., respiratory rate 40 per minute and labored, pulse rate 140 per minute and rectal temperature 103.4 F.

The clinical impression was gram negative septicemia with shock. A catheter was again inserted and 1,555 cc. urine drained. During the next 24 hours the urine output was 725 cc. Because of increasing respiratory difficulty, a tracheostomy was performed.

At that time the patient's hemoglobin was 12.6 Gm.%, hematocrit 40%, and white blood cell count 19,000 with a predominance of polymorphonuclear leukocytes. Urinalysis revealed red and white blood cells too numerous to count. The blood urea nitrogen was 37 mg.%.

After multiple cultures of the patient's blood, tracheal secretions and urine, 300 mg. hydrocortisone was intravenously administered. During the first 24 hours the patient also received 5 million units of acqueous penicillin, 1 Gm. Chloromycetin, 400 mg. hydrocortisone, and 1.75 mg. digoxin by intravenous injection.

During the next 48 hours the patient's general condition improved although he remained severely obtunded. His blood pressure increased to 100/60 mm.Hg., the pulse rate decreased to 120 per minute and respirations to 30 per minute. Urine output was 2,000 cc./24 hours. The rectal temperature remained 103 F.

On the 15th hospital day, vesicular skin lesions, some with central areas of black necrosis, were noted on the patient's left ear, left cheek and internal aspects of both thighs. Microscopic examination of biopsy of these lesions revealed necrosis of the dermis and thrombosis of blood vessels with gram negative rods compatible with bacteria (Fig. 1).

Three blood cultures, three urine cultures, two sputum cultures, and two skin lesion cultures grew Pseudomonas aeruginosa, sensitive in vitro to Coly-Mycin and moderately sensitive in vitro to Chloromycetin, but resistant to all other antibiotics.

On the 16th hospital day, the therapeutic regimen was changed to intramuscular Coly-Mycin, 240 mg. every other day. By the 18th day, the patient was much more alert and responsive. His blood pressure had increased to 140/80 mm.Hg., pulse rate had decreased to 100 per minute and rectal temperature to 101 F.

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During the next ten days while being treated with Coly-Mycin, the patient made slow, steady progress and gradually became afebrile. On the 20th hospital day, the skin lesions were noted to be resolving, and by the 28th day were completely healed. Intramuscular Coly-Mycin was discontinued on the 28th day.

In the course of the next six weeks the patient's renal function progressively deteriorated. The blood urea nitrogen remained in the range of 180-190 mg.%. The clinical diagnosis was chronic pyelonephritis. He died unexpectedly on the morning of December 18, 1965 almost two months after recovering from Pseudomonas aeruginosa bacteremia with shock and ecthyma gangrenosum.

At autopsy the brain exhibited generalized arteriosclerosis, especially severe in the cerebral arteries, with acute occlusion of the left internal carotid artery, encephalomalacia and degeneration of the periventricular grey matter (chronic Wernicke-Korsakoff syndrome). There was marked Laennec's cirrhosis of the liver and severe bilateral hydronephrosis and pyelonephritis.

The remainder of the postmortem examination was unremarkable.

Discussion

The four major cutaneous manifestations of systemic pseudomonas infection as outlined by Forkner[1] include ecthyma gangrenosum, vesicular lesions, hemorrhagic cellulitis, and maculopapular plaques or nodules. Ecthyma gangrenosum was first described and named by Hitschman in 1897.[2]

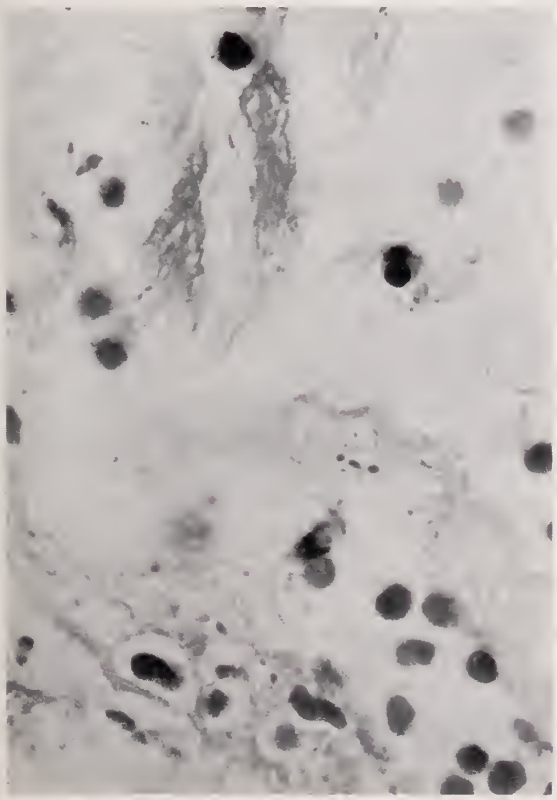


Fig. 1. — A skin biopsy showing necrosis of the dermis and gram negative rods (center, left) compatible with bacteriae.

Fifteen of his 26 cases of Bacillus pyocyaneus septicemia manifested the typical lesions. In 1965 Teplitz[3] described "pseudomonas vasculitis" as a vascular lesion pathognomonic of fulminant pseudomonas infection initiated at the capillary level with bacillary infiltration of vessels from the perivascular tissue rather than from the intimal surface. The necrotic ulcers of ecthyma gangrenosum are therefore due to diffuse bacterial tissue invasion and not the "vasculitis" per se.

Including the present one, there have been 93 well documented cases of ecthyma gangrenosum reported in the literature with recovery in only three, a mortality rate of 97.8%.[2,4-11]

Markley[7] in 1957 reporting on Pseudomonas septicemia in burned patients stated that therapy was of no avail once ecthyma gangrenosum lesions appeared. At the time of that report, of course, specific therapy for pseudomonas infection was not available.

This patient is unusual in that he appeared to recover from both gram negative shock and ecthyma gangrenosum. The prompt use of Coly-Mycin, chloramphenicol and steroids, is believed to have been a definitive factor in his recovery.

Summary

As far as we know, this patient represents an instance of recovery from Pseudomonas bacteremia, ecthyma gangrenosum and severe hypotension. While still in the hospital, he died some two months later from an unrelated cause.

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Review of 35 Cases of Hyperparathyroidism at the University of Florida

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Hyperparathyroidism is being diagnosed with increasing frequency and at earlier stages, indicating growing awareness of the disease and wider application of diagnostic procedures. At the University of Florida, we have had 35 cases in the past six years.

The etiology of hyperparathyroidism is unknown. The largest percentage of cases have a single adenoma which functions autonomously so that hormone secretion continues even when the plasma calcium is high. The disease is rare before puberty and much more common in the female than in the male. Experimentally, hyperparathyroidism can be induced by long-continued calcium deprivation, but this is not a common factor in patients. They seldom show any indication of calcium deprivation or other abnormalities in calcium metabolism.[1] In patients with the polyendocrinomata syndrome, a genetic factor is clearly operative and they usually show chief cell hyperplasia of the parathyroids.[2]

In our series, the age range was 15 to 73 years. There were 31 females and four males. Ten were Negro and 25 white. Of significance is the absence of Negro male patients, suggesting a racial and sexual resistance to the disease. Thirty-one had single adenomas, two had double adenomas and there were two cases of hyperplasia. All adenomas were found in the neck, except one in the superior mediastinum within the thymus which was delivered through the neck incision. In no case was a secondary sternum splitting incision necessary. After failure elsewhere to find the adenoma, re-exploration was necessary in two patients.

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Symptoms

The presenting manifestation largely related to nephrolithiasis, the initial complaint in 20 patients (Table 1). Bone changes were present in only five, a finding consistent with the experience of others in that changes demonstrable by x-ray are present in a minority of patients with hyperparathyroidism.[3,4] Only one patient presented with severe osteitis fibrosa cystica. Four patients had advanced renal disease and azotemia secondary to obstructive uropathy. Three patients presented with intractable ulcer disease, one with pancreatitis; two were initially admitted with psychiatric diagnoses, four presented with nonspecific symptoms of malaise, weakness and abdominal complaints and were found to have elevated serum calciums. The diagnosis was made in two patients after neonatal tetany developed in their babies.

Occasionally a parathyroid adenoma can be palpated. In seven cases the adenoma was thought to be palpable in our series. Serum calcium and phosphorus levels obtained on all patients with renal stones and all patients with peptic ulcer disease, especially in women with bleeding ulcers, were responsible for most of the diagnoses in our series.

Table 1.—Presenting Manifestations.

	Number	Percent
A. Renal complaints (Nephrolithiasis and pyelonephritis)	20	57
B. Non-specific complaints	4	11
C. Bone changes	3	9
D. Peptic ulcer	3	9
E. Psychiatric complaints	2	6
F. Infant born with tetany	2	6
G. Pancreatitis	1	3

Laboratory Studies

A hyperfunctioning parathyroid gland may manifest itself clinically in many ways, but the diagnosis rests upon laboratory determination. An elevated serum calcium, decreased serum phosphorus and high urinary calcium excretion on a dairy product free diet were characteristic findings. Diagnosis is more difficult in the presence of renal insufficiency in which case the serum phosphorus concentration may be in the normal or high range.

All our patients had preoperative determinations of serum calcium and phosphorus on three or more samples. All had elevated calcium on at least three samples ranging from 11 to 18.6 mg.%. Thirty had low serum phosphorus from 1.4 to 3.0 mg.%. The serum phosphorus was normal or elevated in four patients especially when associated with renal insufficiency (Table 2).

Urinary calcium was determined in 24 patients; all had elevated levels following a dairy product free diet for the three preceding days. There appeared to be no correlation between severity of symptoms and extent or variation of the serum calcium levels from normal.

The more elaborate diagnostic tests, that is, the cortisone test,[5] tubular reabsorption of phosphate and calcium infusion tests, were done only in occasional patients and did not help in differentiating other forms of hypercalemia from hyperparathyroidism. Serum alkaline phosphatase was elevated on patients who showed bone changes radiologically.

Operative Technique

Once the diagnosis of hyperparathyroidism is made, the treatment is surgical. We approach exploration of the parathyroid gland with the usual collar incision with subplatysmal flaps developed as for a thyroid operation. Meticulous hemostasis is a requisite to success in locating the parathyroids since the blood-stained field complicates a sometimes difficult operation. A systematic approach in search for parathyroid glands is mandatory. As soon as it is anatomically feasible, we identify the inferior thyroid arteries bilaterally in the space between the carotid sheath laterally and the thyroid gland medially. The larger artery is followed and dissected out first, since it would most likely be the side that contains the adenoma. For us, the inferior thyroid artery has been the key to successful exploration.

If the adenoma involves one of the inferior glands, as most often it does, then by following the artery identification is theoretically inevitable because the parathyroids are attached in the neck only by a thin vascular pedicle and loose areolar tissue. If the adenoma involves one of the superior glands, it usually hangs up at the level of arborization of the artery into the thyroid gland. All four parathyroid glands are identified whenever possible. If there is a question about any other gland, it is also excised and submitted for frozen section. Once the adenoma is found and the remaining three parathyroid glands are identified, it is good practice to remove or biopsy one of the remaining parathyroid glands, since at times it is difficult to differentiate adenoma from hyperplasia on frozen section examination. If all four glands are normal, further exploration of the neck or mediastinum is undertaken as far as the incision permits. We have not had to explore the mediastinum in our series, but we agree with others that it should be done as a second operation after a cervical adenoma has been ruled out.[6]

Selenium methionine scans were done in five patients, but this procedure was abandoned because it was not helpful in localizing the adenoma.[7] Three patients had selective thyrocervical trunk angiography, but again the interpretation was very difficult and we had two false negatives.[8]

Selective staining of the parathyroid with toluidine blue,[9] which is helpful experimentally, has not been used by us but could be of aid in identifying the normal parathyroid from lymph nodes or fat. We doubt whether it would be help-

Table 2.—Preoperative Laboratory Findings.

	# Exam	# Abnormal	% Abnormal	Range	Mean
Serum calcium	35	35	100	11-18.6 mg%	12.5
Serum phosphorus	35	30	86	1.4-4.9 mg%	2.5
24 hour urinary calcium excretion	24	24	100	217-570 mg%	352 mg.
Alkaline phosphatase	28	10	30	4.1-105	K.A. units

ful in the identification of the adenoma since, if not easily accessible, it is probably covered by other structures in the neck.

Anatomic Site

Nineteen adenomas were found corresponding to the left lower parathyroid gland; five were in the left upper, five in the right lower and five in the right upper parathyroid location. One was found in the superior mediastinum.

Histologic Characteristic

Of the 35 adenomas, pathologists reported ten had no dominant cellular type. In 18, the histologic appearance was primarily that of chief cells; in two, oxyphyl cells; in three, clear cells and there were two cases of hyperplasia. No cases of cancer were found.

Postoperative Course and Complications

The serum calcium fell to normal in 24 to 48 hours following removal of the adenoma. Most patients complained of some paresthesia in the fingers and periorally. Twenty of 35 developed a positive Chvostek's sign. In four patients, the calcium fell to tetanic levels of approximately 5 mg.% and the patients required supplemental calcium. Our postoperative management of transient hypocalcemia consisted in initially giving ammonium chloride to produce a mild metabolic acidosis which reduces the reactivity of the peripheral nerves and thus controls symptoms. This has been sufficient treatment in most patients. Three patients required intravenous injection of calcium gluconate or calcium chloride to stop the tetanic attack. Later, they were maintained with oral calcium carbonate, which provides 40% calcium by weight. Only two patients needed maintenance with calcium carbonate for any length of time; one had osteitis fibrosa cystica and the other rickets. There were no injuries to the recurrent laryngeal nerves which were exposed and identified in all explorations. Three patients have had persistent renal calculi despite excision of adenomas and normal serum calcium levels.

Summary

Thirty-five cases of hyperparathyroidism are reviewed. Thirty-one had single adenomas, two had double adenomas, and two had hyperplasia of the parathyroid glands.

Most patients had symptoms referable to the genitourinary tract and some to the skeletal and gastrointestinal systems.

In all patients, serum calcium was elevated and there was a high 24-hour urinary excretion of calcium.

Serum phosphorus was low unless associated with renal insufficiency and azotemia.

Surgical exploration was performed in all patients. All adenomas were found in the neck except one which was located in the superior mediastinum, but was delivered through the cervical incision.

Selenium methionine scans and selective thyrocervical trunk angiography were not helpful in localizing the adenomas.

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Ichthyosarcotoxism — Ciguatera Intoxication

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In August, 1968 seven members of a Winter Haven family became ill after eating smoked amberjack, purchased at a Florida east coast fish market, as an afternoon meal. Seven of the eight persons who ate the fish became ill within an average of five hours. Two were hospitalized while a third who was severely ill refused hospitalization. All seven experienced severe abdominal cramps followed by nausea, vomiting, diarrhea, headache, difficulty in swallowing, and perioral tingling and burning of the tongue. In addition, each developed generalized pruritus and a punctate maculopapular eruption. The most striking symptom was severe bilateral sharp and shooting leg pain unassociated with muscle spasm.

The gastrointestinal symptoms were present for five to six hours. The rash, pruritus and perioral paresthesias were present for four to five days, and the leg pain persisted with irregular exacerbations and remissions for three to four weeks, and possibly longer in one patient.

A specimen of the fish was examined at the Florida Division of Health laboratories. No bacterial contamination was demonstrated, although a Ciguatera toxin bioassay produced lethal results in mice.

Similar outbreaks of Ciguatera intoxication have been reported in the past. Instances were recorded in 1954 at Miami, Fort Lauderdale, Hillsborough Inlet and Pompano Beach and in 1955 at Tavernier and Miami. In fact non-fatal cases have been reported annually between 1954 and 1963 involving over 200 people in Florida. Barracuda were incriminated in all but one outbreak and though "red snapper" was listed as the causative agent in the remaining report, it was thought that the barracuda may have been responsible here as well.

General Review

Intoxication resulting from ingestion of poisonous fish has been named "ichthyosarcotoxism" from the Greek *ichthyos,* "a fish"; *sarkos,* "flesh"; *toxikon,* "poison." Approximately 518 species have been incriminated as poisonous during the last 200 years.[1]

Ichthyosarcotoxism must be differentiated from bacterial contamination of fish and subsequent poisoning whose symptoms, with the exception of botulism, are primarily gastrointestinal. The sensory disturbances regularly present in ichthyosarcotoxism are absent in bacterial intoxications. In most types of food poisoning, the recovery period is usually within six to 48 hours. The recovery period in true fish poisoning is extremely variable —from 48 hours to weeks, months, and even years.[2]

Classification of fish poisoning by type has been attempted by different authors, but listings must be considered tentative. The specific poisons have yet to be characterized chemically, and their pharmacology has yet to be clearly elucidated. Halstead believes that there are six distinctly different clinical entities comprising ichthyosarcotoxism. These involve the following groups of fish: (1) tetraodon (puffer, *Fugu,* globefish, *toado,* etc.), (2) gymnothorax, (3) scombroid, (4) elasmobranch, (5) freshwater fish, and (6) Ciguatera.

Ciguatera poisoning and the word "Ciguatera" apparently had their origin with the early Spanish settlers of Cuba. They used the word "Cigua" to refer to the mollusk, *Turbo pica,* a marine gastropod. When eaten, this mollusk, like certain fishes, gave rise to digestive and nervous disturbances called Ciguatera—hence, the name.[3]

Historically, this biotoxicologic syndrome is not of recent origin. The Greeks avoided certain marine fishes because they believed them to be harmful to the body. This viewpoint dates back to days of the Odyssey (ca. 800 B.C.). Ancient Chinese fishermen were also aware that the yellowtail (amberjack) is "a large poisonous fish fatally toxic to man" (A.D. 618-907). The first published reference generally accepted as referring specifically to Ciguatera poisoning in the Americas (West Indies) is by Peter Martyr of Anghera (1457-1526) and was published in 1511.[4]

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What is believed to be the largest Ciguatera outbreak in history took place at Rodrigues Island, east of Mauritius, Indian Ocean, in 1748 involving the British naval invasion of Mauritius by Admiral Edward Boscawen (1711-1761). The account described the loss of upwards of 1,500 men after toxic fish had been ingested. Over the years the Philippines, the Marshall Islands, the Hawaiian Islands, the West Indies, Haiti, Cuba, the Bahamas, Jamaica and Florida have all reported outbreaks of Ciguatera intoxication.

More than 300 species of marine fishes distributed throughout four orders have been incriminated in human Ciguatera intoxications (Order Isospondyli, Apodes, Mesichthyes, and Acanthopterygii). Some of the varieties involved are: sea bass, jack, barracuda, snapper, wrasse, parrot fish, and surgeon fish.[5]

Ciguatera poisoning is indeed an extremely treacherous form of fish poisoning since, without a single known exception, the fishes producing it are edible in some areas but toxic in others. Moreover, the toxicity in some regions appears to vary from time to time.

Etiology

There have been many theories proposed over the years concerning the etiology of Ciguatera poisoning. One of the earliest was recorded by Martyr in 1530 when he wrote of a plumbearing tree: "Upon the same banks there grows a tree whose fruits are sure poison. When fruits fall into the water and are eaten by the fish, people who afterwards eat these fish are attacked by divers strange maladies." Grudger believed this to be the manchineel berry which is still alleged to be at the bottom of all fish poisoning in the Caribbean-Gulf region.[3]

One belief prevalent among some Florida and Caribbean fishermen is that barracuda and other fish may become poisonous through indirect contact with copper compounds found in the vicinity of old shipwrecks or on the bottoms of ships themselves. It has sometimes been suggested that fish may become poisonous by feeding on jellyfish, stinging corals, or other nematocyst-bearing invertebrates. Feeding on puffers and other toxic fish has also been postulated.[6] Sexual maturity has also been suggested as an influence on the poisonous character of the fish. A bacterial theory has been raised which suggests that the poisons are produced from bacteria either found normally in fishes or introduced by handling.[7] Chemical contamination of the water by materials containing nitrocellulose and other chemicals aside from copper was also postulated as an etiologic factor in causing fish to become poisonous.

There is no scientific evidence for any of these theories, nor is there a basis for the belief that the incidence is seasonal. It now seems generally agreed that fish become poisonous through influences existing in reef environments. This has been postulated by Randall[8,9] based upon the following observations: (a) the toxin must originate in the environment because only fishes in a restricted area are toxic while those of similar size and type elsewhere are not; (b) in affected areas, not all species are toxic and, because food and feeding habits are the principal variables, food is a likely source of toxin; (c) the food, i.e., the basic poisonous organism, is probably benthic because toxic specimens do not occur in open seas where only plankton are available. Most ciguatoxic fishes are indeed bottom-dwelling shore fish; (d) if the benthic food is algae, it must be small to accommodate the delicate mouth structures of some poisonous fishes; (e) blue-green algae, sometimes toxic, are suspect; (f) violently poisonous large predaceous fishes presumably accumulate toxin from their less toxic prey, and they can retain the toxin for a long time after being separated from that source; (g) the course of events in many places suggests that benthic organisms at the base of a toxic food chain grow well in areas recently denuded or disrupted by catastrophic events such as violent storms.

Randall's theory, then, is applicable to the residents of the Gilbert Islands who found that many recent island wrecks were cited as the location of a toxic reef, and that rubbish dumped in the sea was also often blamed for toxicity. In 1944 the war with its resulting bombings was blamed for an increase in toxicity off Tarawa. Randall's hypothesis that toxicity may be caused by the first algae to grow on a new substrate appears to be borne out by the aforementioned statements of the Island residents since wrecks, rubbish and bomb craters can all be considered new and denuded surfaces.

The true biogenesis of the poison though has not yet been fully elucidated. The "food chain" theory does seem most plausible. Apparently the toxin is stored unchanged or is a metabolite of something ingested. Also, the toxin can be eaten and stored in the body of the fish without detrimental effect to the fish. Stomach content analyses

have shown that some of the algal members of Cyanophyta are present in large quantities in ciguatoxic specimens. Blue-green algae, both fresh and saltwater species, have been shown to be toxic. It is therefore believed that certain species of the Cyanophyta serve as at least one possible source of ciguatoxin. It has not been determined whether ciguatoxin is a single poison or a complex of poisons, though it is more likely the latter. Larger predaceous fishes are more likely to be toxic than smaller sized fishes of the same species.[4]

Signs and Symptoms

The clinical manifestations of Ciguatera poisoning, like many other diseases, vary greatly depending upon the toxicity of the fish, the individual's sensitivity to the poison, amount of fish ingested, and other factors. Generally symptoms develop within 3-5 hours (range 15 min.-30 hours). The initial symptoms are sudden onset of abdominal pain followed by nausea, vomiting, watery diarrhea, a metallic taste, and tenesmus.[10] Gastrointestinal symptoms will occur in about 40% to 75% percent of patients. Soon after, the victim complains of numbness and tingling in and about the lips, tongue, and throat which may be accompanied by a sensation of dryness of the mouth. In the uncomplicated case, acute symptoms subside in eight to ten hours, and within 24 hours after onset most symptoms will have completely subsided except for a feeling of weakness. The numbness and tingling, though, may continue to a lesser extent for a period of four to seven days.[11]

In more severe cases, the muscles of the mouth, cheeks, and jaws may become drawn and spastic with an accompanying sensation of numbness throughout. Generalized symptoms of headache, anxiety, malaise, prostration, dizziness, pallor, cyanosis, insomnia, chilly sensations, fever, profuse sweating, rapid weak pulse, myalgia, and back and joint aches may be present in varying degrees, or one or more of these symptoms may be entirely absent. The patients usually complain of a feeling of profound exhaustion and weakness. The weakness may become progressively worse until the patient is unable to walk. Muscle pains are generally described as a dull heavy ache, or cramping sensation, but on occasion may be sharp, shooting and affect particularly the arms and legs. Visual disturbances consisting of blurring, temporary blindness, photophobia and scotoma are common. Pupils are usually dilated and the reflexes diminished. Skin disorders frequently reported are usually initiated by an intense generalized pruritus accompanied by erythema, maculopapular eruptions, blisters, extensive areas of desquamation, and occasionally ulceration. The similarity between the classical clinical syndrome and that described by patients is striking.

In severe intoxications the neurotoxic components are especially pronounced. Paresthesias involving the extremities, and paradoxical sensory disturbances may be present in which the patient interprets cold as a tingling, burning, dry-ice or electric shock sensation, and hot objects may give a feeling of cold. Ataxia and generalized motor incoordination may become progressively worse. The reflexes may be diminished, muscular paralyses may develop accompanied by clonic and tonic convulsions, muscular twitchings, tremors, dysphonia, dysphagia, coma, and death by respiratory paralysis. Recovery is slow and may be very prolonged. Complete recovery can require a period of several years and symptoms have been reported for as long as 25 years.[3] The limited morbidity statistics show a case fatality ratio of 12%.

Therapy

The treatment of ciguatoxications is largely symptomatic. An attack does not impart immunity. There are no known specific antidotes. In general, the treatment is directed toward eliminating the poison from the body, combating the physiological effects of the poison, and providing whatever supportive therapy is required. The stomach should be emptied by gastric lavage, emetic, or saline purges at the earliest sign of ciguatoxication. Some authors then suggest that calcium therapy be used,[12] because of rather profound electrolyte imbalances that can occur.

There is still no general agreement as to the exact chemical and pharmacological properties of ciguatoxin. Preliminary studies have shown that the biotoxin of moray eels, groupers, and snappers, display anticholinesterase activity. Despite the common opinion that ciguatoxin also has anticholinesterase properties, the barracuda biotoxin tested by Banner in 1965 did not.[13] Further, a case report in 1963 described the successful use of neostigmine, a cholinergic drug having an anticholinesterase property, in the treatment of barracuda poisoning.[14] Neostigmine corresponds in its action to parasympathetic stimulation and is a potent antagonist of atropine. Had the barracuda toxin contained anticholinesterase activity, the treatment might have been fatal.

Supportive therapy should include rest, quiet and sedation along with parenteral fluid therapy.[12] If pain is severe opiates may be necessary and should be given in small, divided doses. Each of the seven patients in this outbreak responded to symptomatic and supportive therapy.

Despite numerous statements to the contrary by native island fishermen, there is no infallible method of detecting a poisonous fish by appearance. Some natives will feed portions of the fish to one of their pet dogs or cats. If the animal shows no sign of toxicity, the fish is eaten by the family.

In terms of preventing human intoxication, there are fundamental points which should be kept in mind. Never eat the viscera, and recall that ordinary cooking procedures do not render a toxic fish safe to eat; never eat unusually large predaceous reef fishes such as snapper, barracuda, grouper and jack. Banner records one of the few studies that demonstrated a positive correlation between size and toxicity. He showed that the toxicity of L. bohar (red snapper) from the Line Islands increases in all degrees from about 25% in those below 1 kg. in size to 100% in those over 5 kg.[12] This belief is widely held and at one time (1934), a Cuban public health regulation forbade the sale of barracuda exceeding a 1.1 kg. weight limit.

Diagnostic evaluation of any incriminated specimen includes a mouse bioassay whereby a soluble, treated extraction is injected into the peritoneum and the mice observed carefully over 36-48 hours. The mice react to the degree of toxicity producing reversible hypersecretion, hypoactivity and ataxia; or more severely, paralysis, tonic or clonic convulsions, respiratory paralysis and death within one to 36 hours. More elaborate assays involve the cat and the mongoose, though none is entirely satisfactory.

Finally, recent chemical analyses would tend to include the moray eel poisoning (Gymnothorax) within the Ciguatera group. It has also been shown that a Ciguatera-like poison can occur in oysters and clams.[15]

In summary, the underlying causes and treatment of Ciguatera poisoning are still poorly understood. There is no way to predict which fish may be toxic; no way to predict the severity of symptoms that will ensue after exposure, and there is no specific antidote. On the whole, though, it would seem that the overall incidence of poisonous species is quite low. Commercial landings in Florida include approximately 40,000 pounds of barracuda annually. Hence it can be assumed that poisonous barracuda is quite rare. Nevertheless, while most barracuda can be eaten safely there is always a remote chance that any specimen will be poisonous.

Summary

In August, 1968 seven residents of central Florida became ill after eating amberjack. Their symptoms which included nausea, vomiting, cramps, headache, perioral tingling and burning of the tongue plus a generalized pruritis and rash with sharp, shooting leg pain painted the classic picture of Ciguatera intoxication.

Ciguatera is one of five major types of ichthyosarcotoxism and was described as early as 800 B.C. It is now more common in the Pacific and in the Caribbean-Gulf regions. The most commonly accepted theory of its etiology is a food-chain one whereby bottom dwellers feed on toxic food (probably algae) and larger fish accumulate the toxin as they feed on the smaller fish.

The species involved in this poisoning include red snapper, barracuda, amberjack and grouper. The clinical symptoms vary directly with the amount of toxin ingested. Treatment is largely symptomatic as no specific antidote is known. Prevention is difficult, since the involved fish is not ill, and would include not taking the viscera and restrict eating to fish not larger than 1.1 to 2 kg.

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Extra Pulmonary Abscesses Due to Diplococcus Pneumoniae

James Wm. Dickey Jr., M.D.

The decline of the organism Diplococcus pneumoniae as a frequent cause of disease apparently has been due to the effectiveness of antibiotics. However, the organism is ever present and must be considered in the differential diagnoses of a variety of lesions. Although the pneumococcus causes infections primarily in the respiratory system it has been responsible for lesions in tendon sheaths, bursae, joints, sinuses, meninges, bone, middle ear and mastoid, pericardium, peritoneum, and ovary.[1]

This report concerns the recovery of D. pneumoniae in apparent pure culture from a pelvic cul-de-sac abscess in one patient and a pancreatic abscess in another.

Report of Cases

Case 1.—A 25-year-old white housewife began to vomit a few days after delivery of her second child, and diarrhea developed. She improved at home but symptoms recurred with right lower abdominal discomfort prompting admission to Broward General Medical Center eight weeks after delivery.

She appeared acutely ill but in good spirits. The blood pressure was 110/60, pulse rate 86, temperature 99 F., respirations 24, weight 104 pounds. A non-tender mass was felt in the right cul-de-sac, separate from the pelvic wall. Other than this the physical examination was not remarkable. Hemoglobin level was 12.2 Gm., white blood cell count 19,000, with 72 segmented, 12 stabs and 16 lymphocytes. The urine test showed negative results.

The day after admission she was nauseated, had five liquid stools and a temperature of 102 F. She was given tetracycline-amphotericin B, 250 mg. every six hours, did not improve and a laparotomy was performed which revealed a cul-de-sac abscess filled with pus the consistency and color of cottage cheese. The abscess was evacuated and drained through the vagina.

Her postoperative course was uncomplicated. She was kept on tetracycline for three days, discharged in five days and made a full recovery. Smears and culture of the pus showed a pure culture of D. pneumoniae, sensitive to tetracycline.

Case 2.—A 50-year-old white man was in good health until seven years before admission when he began having epigastric pain. He continued to work long hours, drank and smoked heavily, until five years before admission when x-rays showed inflammatory changes in the stomach and duodenum, calcification in the pancreas and infiltrative changes in the lungs, proven to be tuberculosis. At a sanatorium he was found to have gallstones and pancreatic disease. Laparotomy was performed, biopsies of the pancreas taken and no further tissue removed because of the impression of carcinoma of the pancreas. The biopsies were negative for cancer. The epigastric pain continued and bilateral splanchnic nerve section resulted in permanent relief of pain. Then segmental resection of the left upper lobe of the lung was done.

After three years the tuberculosis was controlled and he was released from the sanatorium and worked until three months before admission. At that time he began to lose his appetite, developed shaking chills and fever with temperature up to 105 F. and was treated with penicillin and streptomycin. There was no jaundice but he had frequent foul-smelling yellow stools.

On admission he was emaciated and pale. There was a non-tender mass 15 cm. in diameter in mid-epigastrium. Hemoglobin level was 13.4 Gm.

At operation a distended, stone-filled gallbladder was removed. A thick-walled pancreatic cyst measuring 25 cm. by 5 cm. was filled with thick yellow pus. A Roux-Y jejunal limb was anastomosed to the cyst for drainage. He recovered slowly but completely and returned to work in six weeks. Culture of the pancreatic cyst contents showed D. pneumoniae in pure culture.

Discussion

In order to review briefly the unique pathogenesis of infections with D. pneumoniae, a few classic observations are repeated.

"The pneumococcus is perhaps the best illustration of a bacterial species that produces disease apparently solely through invasive properties, in other words because of the capacity to invade and multiply in living tissues without evidence that soluble toxins, in the usual sense, play a part."[2] Following invasion of the tissues, edema, consolidation, infarction, and then the collection of masses of pus cells in localized areas interfere with the function of involved organs and nearby structures, mostly in a mechanical way.

The route of entry of the pneumococcus is most likely through the respiratory tract, since from 25% to 50% of the population carry virulent pneumococci in their nasopharynges.[3] A transient bacteremia would allow organisms to spread from the blood stream to tissues previously damaged and offering a suitable climate for growth.[4] In the first case trauma to pelvic structures by the birth process, and in the second case a flareup of chronic obstructive pancreatitis could have prepared the sites for bacterial invasion and growth.

After local infection begins, spread of the pneu-

mococcus into the new areas of tissue is slowed or arrested by the appearance of antibodies between the fifth and tenth days. The localized organisms become engulfed or surrounded by phagocytes, or pus cells, a walled-off abscess is formed and the organisms multiply more slowly as they come into a resting state. Wood states: "It is well known that resting bacteria are not susceptible to the antibacterial action of penicillin. Thus it is not surprising that clinical experience has demonstrated that purulent pneumococcal infections such as empyema respond satisfactorily only when chemotherapy is combined with some form of drainage which removes the bulk of the necrotic exudate."[5]

The two patients presented show a clinical course following this sequence of pathologic events and were treated by adequate surgical drainage.

Summary

A case each of abscess of the cul-de-sac and abscess of the pancreas due to D. pneumoniae are presented. The pathogenesis of chronic abscess formation is discussed and surgical drainage of such abscesses is advocated.

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Erratum

On page 25 of the May, 1970 issue of the JOURNAL, Dr. Richard M. Fleming, a co-author of the scientific article entitled "Tumor of the Neck Caused by Cervical Rib" which begins on that page, is incorrectly identified as clinical instructor of surgery at the University of Miami School of Medicine. Dr. Fleming is clinical professor of surgery. Dr. George Kleinfeld, the other co-author, is a clinical instructor of surgery as stated.



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Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia,* exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

Dosage Forms: Oral tablets . . . 250 mg.
Vaginal inserts . . 500 mg.

*References available on request.

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Research in the Service of Medicine



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L. W. C.

Eighty-six last June.
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Retired, respected and revered by Methodists
In towns scattered over North Georgia and Alabama,
Continuing with duties as leader of a Golden Age Club,
Thanksgiving came, then Christmas with its hurried festivities
Interposed with the chores of an assistant pastor.
Awaking confused one morning this year,
Disoriented and unable to get out of bed;
Hospitalized for pills, diet, physiotherapy and bedrest.

This news produced a sudden, numbing fear
That you, an immortal mortal, taken for granted,
And too seldom corresponded with,
Might not be among the living much longer.
Provoked memories of a half century
Of you always being around
Or as near as the telephone.
Stimulating my earliest recollections of you
Watching me learn to tie my shoes.
Being a reassuring part of the frightening and lonely experience of moving so often.
Presenting me with a pocket watch on my seventh birthday.
Taking us by train to North Carolina the summer mother tutored me to get in the class with kids my age.
Teaching me to ride my first bicycle, the one with the wooden wheels.
Waking me before dawn to start my paper route.
Giving me a driving lesson in your first Model T, and

Driving it home after I had run into a lady's yard and over her hedge.
Seeing two daughters through college and two sons complete graduate school.
Telling four children goodbye in World War II and
Meeting me at the airport when I came home from a P. O. W. camp.
Performing the ceremony when Mary and I were married.
Christening in turn, each of our three girls, and the first boy.
Christening next, the twins who arrived just after your booklet on Family Planning.
Standing in line at your eighty-fifth birthday reception,
Where, beside you, I shook hands with hundreds of people
As they told me of your influence on their lives.
Listening, now that you're out of bed with brace and cane,
When I last visited to tell you I had been proffered the position of Editor,
Of the time it would take from patients and the family, and
The thrill, the challenge, and the fear,
Could I really measure up to the job?
Replying, you said that I had had no training.
Little realizing your impact on an impressionable mind
Which from age five to 16, Sunday after Sunday, year in and year out,
Was exposed to the best you could read, improvise and orate
On philosophy, ethics, religion and human relations.
What better training could one ask, Dad?
For what difference is there in writing a sermon and writing an editorial?
Happy Birthday and Happy Father's Day—
May God grant you many, many more on this earth.

Your son,

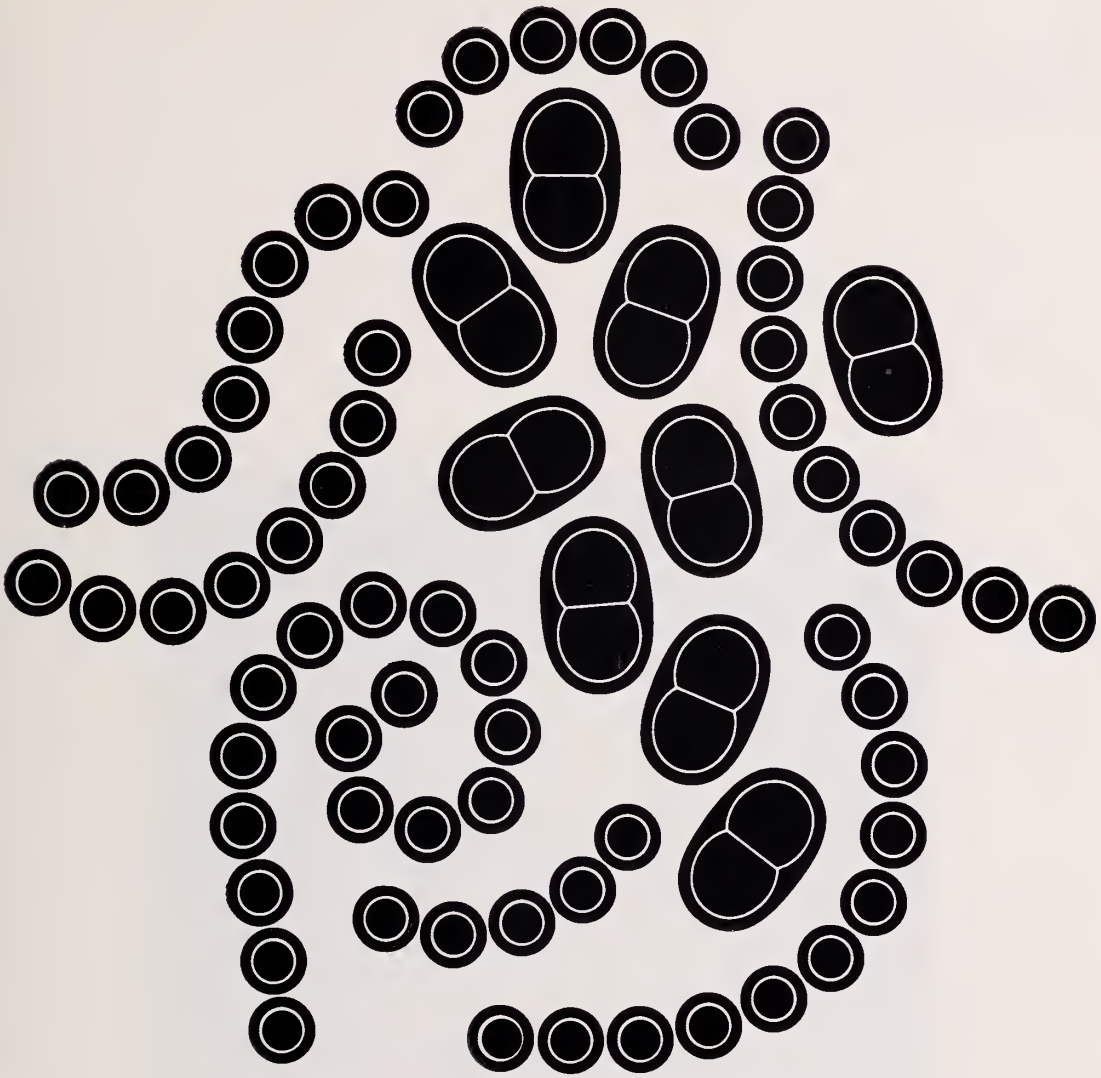
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JAMES T. COOK JR., M.D.

James T. Cook Jr., M.D.

94th President

After receiving a personal gavel and a President's certificate, Dr. James T. Cook Jr. of Marianna became the 94th President of the Florida Medical Association. He was elected President-Elect in May of 1969.

The brief installation ceremony took place near the end of the Third Meeting of the House of Delegates which terminated the Association's 96th Annual Meeting on Sunday morning, May 10. Dr. Cook affixed a Past President's pin to the lapel of Dr. Henry J. Babers and presented a portrait of Dr. Babers to Mrs. Babers, thus assuming official leadership of the Association's nearly 7,000 members.

About the new President, Dr. William F. Brunner, former president of Dr. Cook's home Jackson-Calhoun County Medical Society, has stated: "It is not easy for a general practitioner in a small rural community to achieve a position of prominence in Florida medicine. That Jim Cook has done so attests not only to his leadership qualities and to his abilities but to his love for his profession. He is not only a man of all seasons, he is the man for all reasons."

Dr. Julian Price of Florence, S. C., chairman of the American Medical Association's Board of Trustees, presenting Dr. Cook the gold medal and certificate as "General Practitioner of the Year" in 1960 described him as ". . . typical of the modern physician who combines his talents to bring the best of scientific medicine to the American people yet has the unlimited energies to devote to the service of his community."

Dr. Cook has been practicing general medicine in Marianna since 1945 when he was discharged from the U. S. Army Medical Corps with the rank of captain. He had seen action from Normandy through Europe, been awarded five battle stars, Combat Medical Badge and Bronze Star twice for meritorious service in combat conditions.

Born in Porterdale, Ga., Dr. Cook finished high school at Covington. He received an A. B. degree in 1937 from Emory University in Atlanta and that university's School of Medicine conferred the Doctor of Medicine degree upon him in 1941. After interning one year at Emory University Hospital, he entered military service.

After the war, Dr. Cook brought Lillian to Marianna with him—the girl from Thomasville, Ga., whom he had married before entering the service. He was no stranger there for he had spent many summers with an uncle who had operated a drug store on Lafayette Street since 1902. The druggist admitted enticing the young physician to locate in Marianna and the choice was a happy one. Years later, Dr. Cook described it as "just about the most ideal location you could have." His office is two blocks from their home and the hospital is only three blocks away.

Dr. and Mrs. Cook have one son, James T. III, who recently graduated from Emory University School of Medicine and three daughters, Karen, Carol and Lillianette.

He is past president of the Jackson-Calhoun County Medical Society (now part of the Panhandle Medical Society), past chief of staff of Jackson Hospital, Marianna and remains active in various committees of the two organizations. He organized and was medical director of the Jackson County Heart Clinic for nine years. A member of the Rotary Club, Marianna Country Club, Civic Music Association, Conservation Club and the board of stewards of the Methodist Church, Dr. Cook also served as a member of the board of directors of the Florida Heart Association, as chairman of its Clinics Committee, and as a member of the board of directors of Blue Shield of Florida. He is former chairman of the Florida Park Board.

In the Florida Medical Association, Dr. Cook has been a member of the House of Delegates since 1954, has served as chairman of reference committees, member and chairman of the Committee on Physician Placement, member and chairman of the Committee on Membership and Discipline, member of the Council on Specialty Medicine, Judicial Council and Board of Governors. He served as Vice Speaker of the House of Delegates from 1965 to 1967 and as Speaker from 1967 to 1969.

"That's Jim"

WILLIAM C. ROBERTS, M. D.



Dr. Cook and friend

When a young, well-trained doctor of medicine locates in a relatively small agricultural city in northwest Florida steeped in tradition and closely knitted with family cliques and by virtue of professional ability and personal integrity of purpose hews out a livelihood, at the same time endearing himself to the extent that the people accept him socially and professionally with such enthusiasm to cause the entire community to realize he is an unusual and outstanding person destined to become a valuable asset—

That's Jim.

Now after 30 years, to my personal knowledge, increasing his personal endearment on the area with his great and admirable simplicity along with stunning dignity and becoming contagious to further and more remote distances so that his influence and reputation is spread over the entire state and nation, a fact documented by the American Medical Association in recognition of him as "General Practitioner of the Year," and now by the Florida Medical Association—

That's Jim.

If there is any man who is endowed with more than his share of the finer virtues in life and proves it by being a model physician, husband, father, provider, social and civic leader, religious and God-fearing notwithstanding, and with the ability to ignore his few enemies, he must be a monument to his fellowmen and a beacon for us all—

That's Jim.

Along with a fine medical acumen, talents and hobbies accurately balance the scale—playing the violin for church and community programs, hunting and fishing, and a no mean golfer—rendering him a regular fellow and influencing his ability to make fair and correct decisions in important matters without hesitancy or time-consuming behavior—

That's Jim.

Constant interest and participation in organized medicine through the years has been a testimonial to his honesty, fidelity, ambition, endeavor, tenacity, eagerness, willingness, compassion, intelligence and vigor, considerably influencing forensic and executive abilities which compliment, depict and personify our President—

That's Jim.

▸ Dr. Roberts, 348 Cove Boulevard, Panama City 32401.

Jim – As I Know Him

Francis T. Holland, M.D.

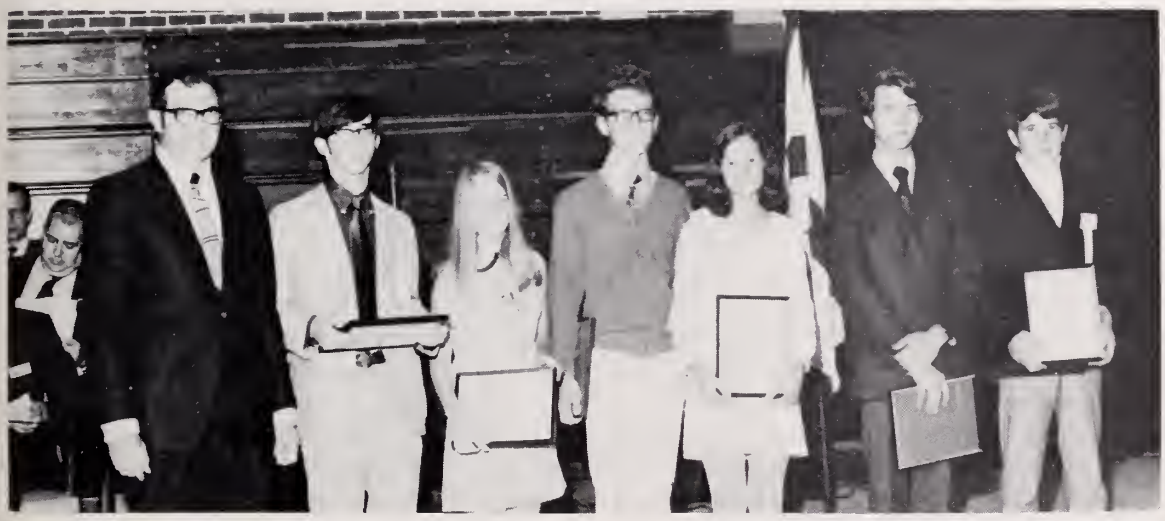
I have known Jim Cook since he started practice in Marianna. He has been active in all phases of medicine in northwest Florida, and his practice has been in an area where the G.P. is king, there being very few specialists between Tallahassee and Pensacola until recently.

Jim has always had the welfare of his patients first, and with that in mind he cared for 90 percent of their needs, but was always aware of the need for consultants and other care not available in his community, and patients were referred to areas where they could receive care. I have seen patients referred that could have been handled just as well by Jim, but he always kept the patient's best interest in mind.

His next thoughts were for organized medicine —not what was best for the G.P., or his area of Florida, or for the specialist, but for all segments of medicine. He realizes that no one segment of the medical profession nor any one doctor can speak for the entire profession and that there must be dialogue between all segments, and we must present a unified front.

When I first became an AMA delegate, I noted the lack of rapport between various specialties and the AMA. This has been, or rather is being, improved as result of a special study committee. Recently, I have noted several instances of division among some segments of the medical profession in Florida. With Jim Cook at the helm, we will not need a special study committee. If all segments of medicine will let him hear their gripes and peeves, he will, with the help of all of us, do what is best for the entire medical profession.

Dr. Holland, 1307 Miccosukee Road, Tallahassee 32303.



Dr. William M. C. Wilhoit, member of the Board of Governors, poses with FMA 1970 Florida State Science Fair award winners (left to right) Michael E. McCloskey, Terry Parker High School, Jacksonville (first place senior division winner); Nancy Ann Kovic, Riviera Junior High School, St. Petersburg (first place junior division winner) and honorable mention winners John T. Roberts, Melbourne High School; Gwen Thomas, Sebring High School; Jack C. Wright, Fort Walton Beach High School, and Michael S. White, Bradford High School, Starke. The first place senior winner received a $1,000 medical school scholarship from the Florida Medical Foundation and a $100 savings bond and the first place junior winner a $50 savings bond. The honorable mention winners were awarded $25 savings bonds from the FMA Woman's Auxiliary. The title of Mr. McCloskey's top-rated exhibit was "In Vitro Production of Homograft Hypersensitivity in the Absence of Antigen." The Association's 14th annual awards were presented April 10 at Pensacola.

The Journal's New Editor



Dr. Collins

THOMAS R. JARVIS

Dr. Clyde Mabry Collins became Editor of the JOURNAL of the Florida Medical Association on May 10, 1970. A native Georgian, he is engaged in the practice of general surgery in Jacksonville.

A graduate of Emory University in Atlanta, his birthplace, and the Medical College of Georgia at Augusta, Dr. Collins served an internship at Downey Hospital at Gainesville, Ga., and residencies at Grady Memorial Hospital in Atlanta and at Duval Medical Center in Jacksonville. Other than a short period in Virginia and service as a medical officer during World War II, he has spent his entire professional life in Jacksonville.

He is married to the former Mary Louise MacDuffie, of Tampa whom he met when she was a student nurse at Grady Memorial Hospital. They have three sons and three daughters: Mary Stuart, Miriam, Martha, Clyde Jr., Leo Wilkie and Edward MacDuffie.

Dr. Collins serves his chosen specialty through the American College of Surgeons and is certified by the American Board of Surgery. He is currently serving as president of the Florida Association of General Surgeons. He was president of the Duval County Medical Society in 1968 and editor of its Bulletin for a period of six years. That he is keenly interested in improving medical journalism is evidenced by his joining with fellow writers from throughout the nation in the American Medical Writers Association.

Quietly unassuming and pleasantly even-tempered, Dr. Collins joins a select group of physicians whose task has been to faithfully and accurately record the activities and scientific achievements of Florida physicians in their official JOURNAL.

Mr. Jarvis is JOURNAL Editorial Consultant. He served for many years as Managing Editor.

Difficult Shoes To Fill

With deep regret the Journal staff realized Dr. Franz Stewart had relinquished the editorship. During the past two years we have watched with pride as JOURNAL covers blossomed from black and white to pastel to brightest hues, depicting the scenic beauties of Florida and, to the more observing reader, subtle and delightful seasonal messages conjured up in the deep and imponderable mind of our Editor. To accomplish this he inspired photographers and artists to submit their work. The covers have been masterpieces of folk art, isolating and intensifying our Editor's views of the mysteries and undercurrents of human motivation. Obsessed with the necessity to communicate, they describe his belief in beauty, nobility and love of man. Inside the JOURNAL, under Dr. Stewart's inspiration, we have read increasingly good papers from young, seasoned and would-be authors, having covered the gamut of medical experiences from the east coast to the west, from urban areas to rural and from the ridiculous to the sublime.

Dr. Stewart's compositions, often pure poetry, are descriptive, beautiful and lucid. It is hoped that he will continue active on the JOURNAL staff. His editorial, "Death, A Concept to Reconsider," published in October 1969, evoked such admiration and interest not only from medical readers but also from theological and legal fields that we are still receiving requests for reprints. Many readers have told us that it needs reading and re-reading for each time more substance is perceived.

With the advent of a changing editorial board, the question arises as to what is the purpose of a state medical journal. Undoubtedly there must be some organ of communication to inform the members of the Association, as well as an official repository for the proceedings of the annual meetings and the scientific papers which arise from private practitioners and medical schools. Also there needs to be a place for publication of articles on medical subjects peculiar to our state as well as the socioeconomic problems, plus the aims, aspirations and admonitions of any doctor who wishes to use this prerogative.



Dr. Stewart

The officers of your Association and the editorial staff of the JOURNAL are very interested in reaching each member and so solicit your suggestions, interest, criticism, scientific articles and editorials. We are not opposed to fostering an attack upon the conventional means of presentation in hopes of developing improved methods of information recall, retrieve and report. We hope to provide interpretation to give JOURNAL readers a wider appreciation of what, why, when, where and how medicine is practiced in Florida. We would like to solicit articles dealing not only with social issues but with the practical practice of medicine and new and better ways of delivering medical care.

We would like to know what is happening and what is going on so as to advise you. For this we need your assistance. Finally we hope to develop an editorial board of capable physicians to apply rigid standards of evaluation to make certain that what we publish is worth your time and attention. Now is the time for all coffee room orators to grab a pen and put their complaints on paper or else bend the ear of a member of our staff.

C.M.C.

The 96th Annual Meeting

After three long and weary sessions, the 96th Annual Meeting of the Florida Medical Association House of Delegates was adjourned a little past 1:00 p.m. on Sunday, May 10th, by Charles Donegan, its speaker. The FMA staff should be commended upon the tremendous job of planning and maintaining the many events of the convention. There were a few minor deficiencies and unavoidable circumstances. One delegate was heard to complain that guest lecturers should be carefully screened to determine their ability in public speaking since it is an affront to an educated audience for a speaker to stand up and read a paper. Occasionally there were projected charts with many figures in fine print which were unreadable even to observers in the front row. One conference room was not air conditioned while some were too cold. But on the whole, if you didn't attend, you missed a lot of educational things and a lot of fine people.

Dr. Babers' address was sincere and inspiring. Reed Bell looked too young to have all those children but there was no doubting the many documented tasks he had performed for which he was given the A. H. Robins award for outstanding community service. An innovation was the opening of the first meeting of the House of Delegates Wednesday afternoon at 4:00 p.m. This was followed Thursday morning by a meeting of Blue Shield with Dr. Warren Quillian presiding.

The following afternoon, a special program on medical education was given where it was mentioned that the freshman class will begin in 1971 at the University of South Florida. The USF Dean, Dr. Donn Smith, stated that their goal was for every ably qualified and motivated young person in Florida to have the opportunity to study medicine. Dean Suter of the University of Florida College of Medicine in Gainesville reported that 29% of the 240 men and women graduated are now doing general practice in this state. He gained the interest of all private practitioners by saying that too much of a university atmosphere may lead to atrophy of the teaching of the art of medicine, as it neglects the human approach by being estranged from the needs of society. The growth in producing MD's at Gainesville is from 60 in the first class to 150 in the present class with a house staff that has enlarged from 40 to 250. He further stated that medical education is dependent on the practicing physicians and solicited the interest and support of organized medicine.

On Saturday morning, the Rev. Dr. Paul McCleave and Dr. James Jude with the Rev. Sam Banks, chaplain of the J. Hillis Miller Health Center at the University of Florida, sat on a panel entitled "The Physician's Responsibility in Prolongation of Life." This was moderated by Dr. Sam Smith of Tampa. Opinions developed by the panel on deciding when all hope must be abandoned revolved around the ordinary versus extraordinary therapy, depending upon the judgment of the physician in attendance. On Friday, many lovely members of our Woman's Auxiliary put on their annual luncheon with the guest speaker, Senator Robert Packwood from Oregon, who said that there were five virtues to which we should all aspire, these being purpose, imagination, tolerance, discipline and zeal.

In the second and third sessions of the House of Delegates, reports of the reference committees were presented by their chairmen, Drs. Donald Marion, Thomas Thames, Richard Clay, Francis Coleman and Thad Moseley. They, as well as their committees, are to be commended for the long, thankless task of listening to all who wished to speak, harangue, criticize and complain about the many socioeconomic and professional faults of the practice of medicine, including health and education, public policy, finance, administration, legislation and medical economics.

Whether to admit the osteopathic profession or even to consider it ethical to associate with them was discussed near the end of the second session and passed by a slim majority. As it appeared that debate had been unfairly limited, the resolution was brought back to the floor Sunday morning and again debated at length. The questions of cultism, legality of hospital staff privileges, postgraduate medical education, the foreign medical graduate, lack of medical manpower and consideration of better patient care for more people —all were discussed as affecting the association of the two groups. After a longer debate, often dividing local county delegates, friends and even associates, a vote was again called for, this time passing by a larger majority, stating that the ethics of the professional relationship between doctors of medicine and osteopathy within each component society of our state will be determined

by the medical society of that county provided, however, that such ethics be reviewed by the Judicial Council of the FMA, suggesting that changing times demand changing concepts and changing opinions yet, at the same time, maintaining one's own principles and high standards of medical care. What the future holds for this problem, only time will tell.

Blue Shield came in for its share of brickbats, criticisms and praise and was defended and criticized by members of the Association. The final order of business was the election of officers. Two outstanding men who had both performed years of service to the association were nominated for the office of President-elect and after a number of seconding addresses, Floyd Hurt of Jacksonville was elected. Richard Dever of Miami was acclaimed by unanimous vote to the position of Vice President, the Speaker and Vice Speaker of the House were unanimously re-elected and Jim Walker was elected Secretary-Treasurer.

Sitting through the sessions of the House of Delegates was both educational and tiring. It was interesting and instructive to see the delegates speak and to weigh their rhetoric and analyze their reasons and motives. Each county society should be proud of its delegation, whose only reward is the satisfaction of having completed a job well done. In spite of all the weary feelings, frustrations and sense of having accomplished little, it is all outweighed by being away from the responsibilities of a busy practice, the greeting of old friends, the making of new friends, the fellowship and entertainment of eating out at night.

See your July JOURNAL for complete details of the proceedings of the 96th Annual Meeting.

C.M.C.

FOUR THINGS

Four things a man must learn to do
If he would make his record true:
To think without confusion clearly;
To love his fellow men sincerely;
To act from honest motives purely;
To trust in God and heaven securely.

—Henry van Dyke

Florida Medical meetings

FMA Approved Postgraduate Meetings

JUNE

8-13 Fourth Annual Workshop in Electrocardiography, Hamilton, Bermuda. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg, Fla. 33705.

AUGUST

27-29 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Fort Lauderdale. For information: A. F. Caraway, M.D., Div. of Health, P.O. Box 210, Jacksonville 32201.

OCTOBER

9-10 Seminar on Diabetes, Sheraton Hotel, Fort Lauderdale. For information: George P. Heffner, M.D., 4602 N. Federal Highway, Fort Lauderdale 33308.

NOVEMBER

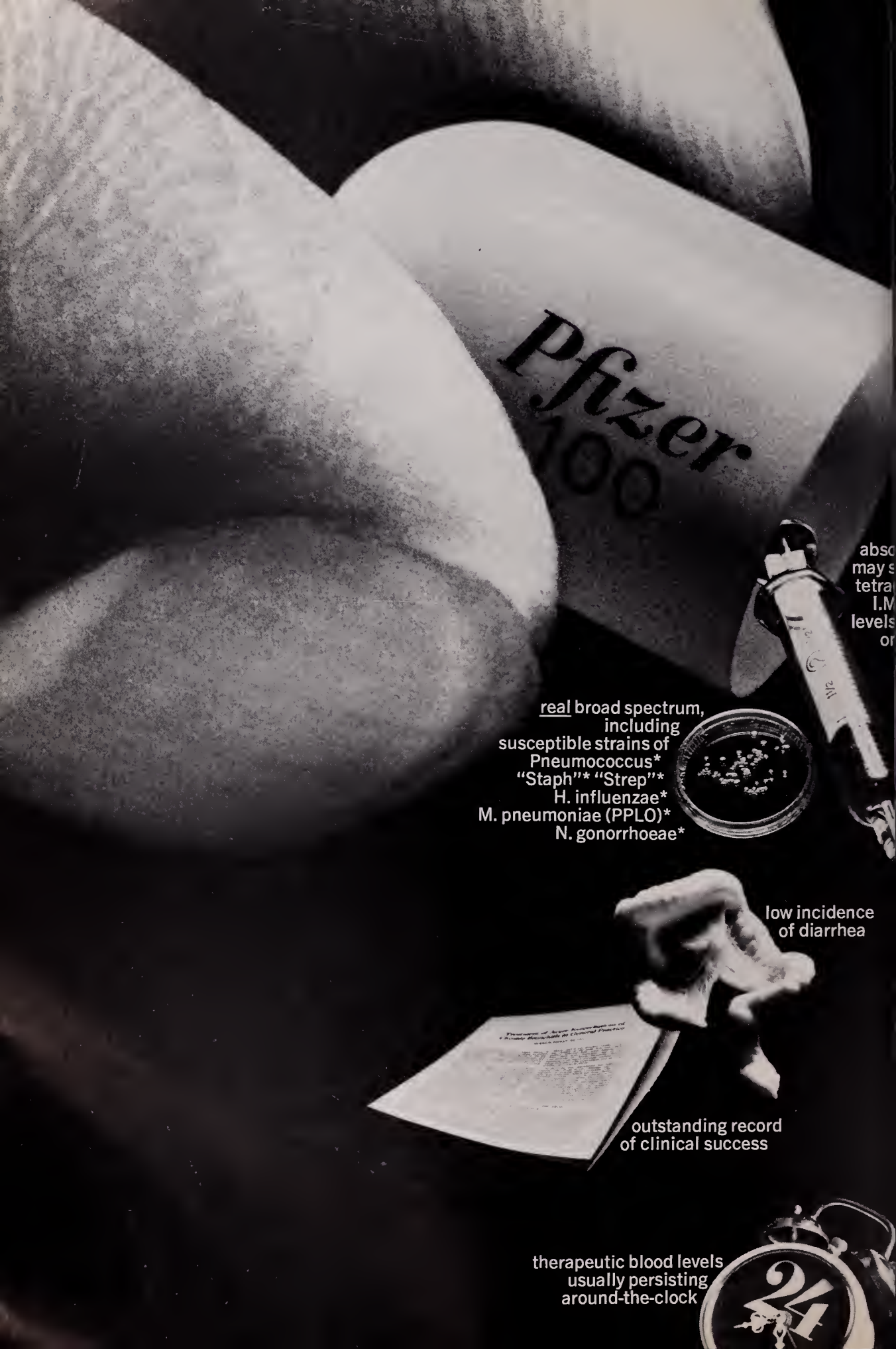
19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, University of Florida, Gainesville. For Information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

DECEMBER

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.


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See Brief Summary on next page for information on side effects and contraindications.

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Contraindicated: In individuals who have shown hypersensitivity to doxycycline.

Warnings: The usual dosage and frequency of administration of Vibramycin (doxycycline) differs from those of other tetracyclines. Exceeding the recommended dosage may result in an increased incidence of side effects.

If renal impairment exists, even usual doses may lead to excessive accumulation of the drug and possible hepatic toxicity. For such patients, lower than usual doses are indicated and, if treatment is prolonged, Vibramycin serum level determinations may be advisable.

Vibramycin, like other tetracyclines, may form a stable calcium complex in any bone-forming tissue, although *in vitro* Vibramycin binds calcium less strongly than other tetracyclines. The use of Vibramycin during tooth development (last trimester of pregnancy, neonatal period, and early childhood) may cause discoloration of the teeth (yellow-gray-brownish). This effect may occur mostly during long-term use, but also may occur with short-treatment courses.

Increased intracranial pressure with bulging fontanelles has been observed in infants receiving tetracyclines. This effect has disappeared rapidly on cessation of therapy with no sequelae.

In certain hypersensitive individuals treated with Vibramycin, exposure to direct sunlight may precipitate a photodynamic reaction. In individuals with a history of photoallergic reactions to tetracyclines, exposure to direct sunlight should be avoided and treatment should be discontinued at first evidence of skin discomfort.

Precautions: As with any antibiotic, overgrowth of nonsusceptible organisms may occasionally occur. Constant observation of the patient is essential. If such superinfections are encountered, Vibramycin should be discontinued and replaced by appropriate therapy.

When treating gonorrhea in which lesions of primary or secondary syphilis are suspected, proper diagnostic procedures, including darkfield examinations, should be utilized. In all cases in which concomitant syphilis is suspected, monthly serological tests should be made for at least four months.

Adverse Reactions: Nausea, vomiting, diarrhea, vaginitis, as well as reactions of an allergic nature such as dermatitis, urticaria, and anaphylaxis may occur but are rare. Glossitis, stomatitis, proctitis, onycholysis and discoloration of the nails may rarely occur during tetracycline therapy as with other antibiotics. If severe adverse reactions, individual idiosyncrasy, or allergy occur, discontinue medication.

As with other tetracyclines, elevation of SGOT or SGPT values, or elevated BUN have been reported, the significance of which is not known at this time. Anemia, neutropenia, and eosinophilia have been reported, as with other tetracyclines.

Animal Pharmacology: As with other tetracyclines, at doses greater than those recommended for human usage, Vibramycin produces discoloration of animal thyroid glands. Careful monitoring of animals and humans has disclosed no abnormalities of thyroid function studies. Also, as with other tetracyclines, at relatively high oral doses, evidence of hepatotoxicity has been noted in dogs and signs of gastrointestinal intolerance have been seen in both dogs and monkeys.

Dosage: The usual dose of Vibramycin is 200 mg. on the first day of treatment (administered 100 mg. every 12 hours) followed by a maintenance dose of 100 mg./day. The maintenance dose may be administered as a single dose, or as 50 mg. every 12 hours. In the management of more severe infections (particularly chronic infections of the urinary tract), 100 mg. every 12 hours is recommended. The recommended dosage schedule for children weighing 100 pounds or less is 2 mg./lb. of body weight divided into two doses on the first day of treatment, followed by 1 mg./lb. of body weight given as a single daily dose or divided int doses, on subsequent days. For more seve infections up to 2 mg./lb. of body weight be used. For children over 100 lbs. the us adult dose should be used.

Acute gonococcal anterior urethritis in ma —a single dose of 300 mg. or 100 mg. b.i.d for 2-4 days.

Acute gonococcal infections in the adult fe should be treated with doses of 100 mg. b. until cure is effected.

Therapy should be continued beyond the t that symptoms and fever have subsided. When used in streptococcal infections, the should be continued for 10 days to preven the development of rheumatic fever or glomerulonephritis.

If gastric irritation occurs, it is recommend that Vibramycin be given with food or milk Studies indicate that the absorption of Vibramycin is not markedly influenced by simultaneous ingestion of food or milk.

Simultaneous administration of aluminum droxide gel given with tetracycline antibiot including Vibramycin has been shown to d crease absorption.

Supply: Vibramycin Hyclate (doxycycline hyclate) is available as capsules containin doxycycline hyclate equivalent to 50 mg. o doxycycline, bottles of 50, unit-dose pack o 100 (10 x 10's), and X pack of 50 (5 x 10's) capsules containing doxycycline hyclate equivalent to 100 mg. of doxycycline, bottles of 50, unit-dose pack of 100 (10 x 1 and V pack of 25 (5 x 5's).

Vibramycin Monohydrate (doxycycline mo hydrate) is available as a dry powder for or suspension containing when reconstituted doxycycline monohydrate equivalent to 25 of doxycycline per 5 cc. (each teaspoonful) with a pleasant-tasting raspberry flavor, 2 bottles.

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Driver Re-Examination Program

Francis T. Holland, M. D.

In an effort to reduce Florida's rising accident rate, the 1967 session of the Florida legislature passed a law requiring periodic re-examination of all Florida drivers. The re-examination program begins January 1, 1971 and persons will report for re-examination depending upon their birth year and the first letter of their last name. All drivers licensed by the state of Florida, regardless of age, are required to take the re-examination. The only exceptions to this will be military personnel and their dependents residing with them, while serving on active duty outside the state of Florida.

After the initial examination, all drivers must be re-examined every four years thereafter. The re-examination will consist of:

1. A vision test
2. A hearing test
3. Ability to read and understand road signs.

The Department of Highway Safety and Motor Vehicles estimates that one million people will come in for re-examination during the first year of the program and based on past statistics, approximately 250,000 of these will be referred to an eye doctor because of certain vision problems. The persons who will be examined during this year are those with last names beginning with the letter "A" through "M" and whose birth date is an odd year.

Applicants will be referred to eye doctors when the driver license examiner finds they do not meet the state minimum visual standards. They will not be passed until they return from the eye doctor and pass the vision requirements.

Dr. Holland is chairman, Medical Advisory Committee to the Department of Highway Safety and Motor Vehicles, State of Florida.

RE-EXAMINATION SCHEDULE

Birth Year	First Letter of Last Name	Year to be Re-examined Upon Renewal
ODD	A THRU M	1971
EVEN	A THRU M	1972
ODD	N THRU Z	1973
EVEN	N THRU Z	1974

(Example: If you were born in 1947, which is an odd year, and the first letter of your last name is "A", or any letter through "M", you will be required to be re-examined when your license expires in 1971.)

In an effort to reduce the inconvenience to the motoring public as much as possible, the Division of Driver Licenses is asking the cooperation of the Florida Medical Association in encouraging all eye patients to have these forms filled out prior to their re-examination year, so that there will be no problem in their retaining their driver licenses. Forms for these examinations will be forwarded to each doctor through the county medical societies and other sources. It is hoped that each of us will encourage our patients to come in for an early re-examination of their eyes, eliminating the difficulty of retention of driver's licenses.

Any detailed questions concerning this matter should be directed to Major C. W. Keith, Director, Division of Driver Licenses, Department of Highway Safety and Motor Vehicles, Tallahassee, Florida 32304.

▶ Dr. Holland, 1307 Miccosukee Road, Tallahassee 32303.

As The Year Ends

Marion S. Gilliland
(Mrs. C. H.)

As my year as president of your Auxiliary is over, it seems appropriate to report on the year's activities in the 24 organized county auxiliaries. Their activities have been many and varied, and all worthwhile.

Thirteen county auxiliaries responded to a community need for programs on drug abuse. Many of them used the package program furnished by the national auxiliary and most of them used the film, *Marijuana*. The state auxiliary purchased one copy which has been widely circulated throughout the state, and two county auxiliaries bought copies. One of these was presented to the county school system. Some counties were sole sponsors of the program, others worked cooperatively with other community organizations. One county is represented on the local Drug Abuse Council.

Three auxiliaries worked with suicide prevention programs; two counties instituted Block Home programs to provide, along school routes, homes where children can turn for help in time of crisis. Three counties worked with retarded children; four helped with child guidance centers of Half-Way Houses. One auxiliary visited teenagers who were in jail. Two counties helped with Mental Health Clinics and one county compiled a directory of mental health facilities in the area. Fifteen auxiliaries contributed Christmas presents, money, magazines, clothing and Valentine treats to mental hospitals.

Two of our larger county auxiliaries were responsible for introducing a program of health education in the curriculum of their local school system. Two others continued the Crusade for Morality in Mass Media begun last year. Auxiliaries in three counties helped to man mobile x-ray units and three others assisted in rubella immunization campaigns. Two auxiliaries carried out vision and hearing tests on pre-schoolers, and four had programs on poison prevention.

There were many active safety programs. Three sponsored traffic and highway safety, two had driver improvement programs, and three sponsored defensive driving courses. Four had home safety programs; one presented boating safety; one had a medical self-help program. Three auxiliaries sponsored personal self-defense programs. The state auxiliary had hoped to produce a training film for this, but the tight money situation has delayed financing and production. We still hope to do this and make the film available on a state and national basis.

We have sponsored 97 active Health Careers clubs this year throughout the state with a membership of 2,983 and have made $13,055 available for scholarships and loans to students in health-related fields. One alarming aspect of this particular project is that this year's membership represents a decrease of 25% since 1967. Faced with the need for one of every ten high school graduates to become a worker in some field of health in order to fill the nation's future demands for health services, we must find some way to attract, and retain, much greater interest in these careers. This is one of every auxiliary's continuing priority projects. Perhaps our continued cooperative effort with the Florida Health Manpower Council will serve to help fill this need.

Continuing interest has been evidenced in legislative and political matters. Many, many letters have been written to legislators opposing the osteopathic and chiropractic bills since June 1969. Some members are members of FLAMPAC and work actively for candidates of their choice. A second "Day in the Legislature" was sponsored on April 29 with good attendance. This will become a yearly tradition with, we hope, increasing participation.

All counties have raised money for AMA-ERF through various devices, but all within the medical community. The more than $15,000 reported prior to April 15 will have been considerably increased when all monies are turned in.

Mrs. Gilliland is immediate past president, Woman's Auxiliary to the Florida Medical Association.

Proceeds from the Fourth Annual Benefit Art Show held in conjunction with the Florida Medical Association convention will again go to AMA-ERF.

Again this year, through our International Health Activities committee, a bazaar was held in conjunction with our Fall Board Meeting and Conference, where handmade articles of all kinds are contributed and sold to other members of the auxiliary. (Incidentally, this is also a terrific demonstration of the many and varied talents of your wives). The $575.01 proceeds from this bazaar were donated to Med Aid Marco in Guatemala again this year. We extend the hand of friendship to foreign doctors and their wives, both in our communities and through letters to individuals in foreign countries through the Doctor's-Wife-To-Doctor's-Wife program. Auxiliaries have also provided toys, money, surgical supplies and drugs for Project Hope, Project Concern, Med Aid Marco, and the Christian Medical Society.

One county auxiliary helps to man an infirmary for children of migrant workers and also helps to provide milk for these children. Another supplies clothing for infants of indigent parents. *Today's Health* is placed in the library of every secondary school in one county. Another equipped and furnished suitcase medical museums to be displayed in schools by the local museum. One county, after sponsoring anti-smoking programs, furnished "Smoking Sam" to the Interagency Council on Smoking and Health. Still another is sponsoring a program on "Laws Teenagers Should Know." Still another works with a youth shelter.

We have actively worked this year to inform the wives of medical students, interns and residents about the activities of the medical auxiliary, and to interest them in the student branch —Woman's Auxiliary to the Student American Medical Association. These are the women who will be leaders in support of organized medicine in the years to come. It is a pleasure to report that one chapter will soon be organized. As a practical help for medical students, a furniture loan closet was established this year by the local auxiliary for students at the University of Florida.

These are the many and varied contributions to community service carried out by your wives through their medical auxiliary. But that is not all they did. They averaged 285 hours per year in community service through other organizations. And what a variety of activities and interests it demonstrated! They include PTA, various church and synagogue related groups, an infinite number of fund drives, tutoring programs, girl scouts, boy scouts and cub scouts, fine arts and music societies, family services, many children's service organizations, Red Cross, hospital guilds and auxiliaries, science centers, museums, mental health groups, Junior League, Junior Service League, Junior Welfare League, Women of Rotary, Child Care centers, Community Service Councils, Safety Councils, and Emphysema Anonymous. You can bet there are still others which were not reported.

All of this, you will agree, is mighty good public relations for individual doctors and for medicine in general. And it was done with 3,-077 members. This is 46% of our potential membership. Think what we could do with 100%!

▶ Mrs. Gilliland, 324 N. W. 24th Street, Gainesville 32601.

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Physicians and Narcotics Use Misuse and Abuse

George S. Palmer, M.D.

Members of the Florida State Board of Medical Examiners believe that timely advice and warning are in order concerning use of narcotics. Too many practicing physicians are not acquainted with the narcotic laws, both state and federal, and thereby are in danger of getting into serious trouble because of lack of knowledge of proper and legal use of narcotics. We have had several cases before the Board due to ignorance of the law which is no excuse. These resulted not only in personal embarrassment but also in some instances to loss of narcotics license and danger of loss of medical license. All physicians are subject to the Uniform Narcotic Drug Law, Chapter 398, Florida Statutes. Important provisions are as follows:

> It is unlawful for a physician to prescribe a narcotic drug except in accordance with this law. A physician may administer and dispense narcotic drugs only for legitimate medical purposes.
>
> Possession of narcotic drugs by a physician is illegal except in the regular course of his profession. It provides for limitations of total dosage of certain narcotic drugs given to one patient within a 48-hour consecutive period except for certain exceptions.
>
> It provides certain limitations on purchase by physicians from a druggist of an aqueous or oleaginous solution containing narcotic drugs.
>
> A physician may, in good faith, administer narcotics or cause them to be administered by a nurse or intern.
>
> A physician is required to maintain a record of narcotics received and administered for two years.
>
> Narcotics not legally possessed are subject to forfeiture.
>
> All prescription orders, narcotics stocks, and required records are subject to inspection by federal and state officers.

The statute concerning barbiturates of the Florida Drug Abuse Law states that a physician may lawfully possess barbiturates only for bona-fide medical use. Physicians must keep a record of barbiturates received and prescribed or dispensed for two years.

Conviction for violation of the Uniform Narcotic Drug Law or the Florida Drug Abuse Law constitutes grounds for revocation or suspension of a physician's medical license.

Physicians must also be aware that misuse or abuse of other drugs under the so-called dangerous drug list, for example, amphetamines, tranquilizers, and the like, may also subject the physician to disciplinary action by this Board. Every practicing physician should have a copy of Pamphlet No. 56 issued by the Bureau of Narcotics, Treasury Department, Washington, D.C. 20226 entitled, "Prescribing and Dispensing of Narcotics Under Harrison Narcotic Law." This pamphlet clearly delineates the proper use of narcotics, especially in relationship to the treatment of narcotic drug addiction.

The Board of Medical Examiners *strongly* advises that every physician read and heed the above statutes and the above pamphlet so that he will avoid any difficulty in the future concerning the use of narcotics or dangerous drugs.

Dr. Palmer is executive director, Board of Medical Examiners, Division of Professions, Department of Professional and Occupational Regulation, State of Florida.

▶ Dr. Palmer, 108 West Pensacola Street, Tallahassee 32304.

Our Mail

Clyde M. Collins, M. D.
1503 Oak Street
Jacksonville, Florida 32204

Dear Dr. Collins:

The JOURNAL is a fine magazine with a history going back about 100 years. It has appeared in different forms and under differing names during this time, but always it has represented and pictured Florida Medicine. You can be proud to carry the responsibility of its image for the present.

As one of the past editors I am confident and proud of the upcoming editor. Your honesty and idealism joined with an enthusiasm and sense of involvement will serve well for you and for us. Your search for objectivity and wisdom will be well reflected in the pages of the JOURNAL.

Your warm and kind letter to me is greatly appreciated. I promise you the compliment of a sincere and critical comment to any question or opinion you may feel inclined to put to me. . .

If you really wish more contributions from me, I should be delighted to continue to write comments. . . . I thank you for the compliment of your offer.

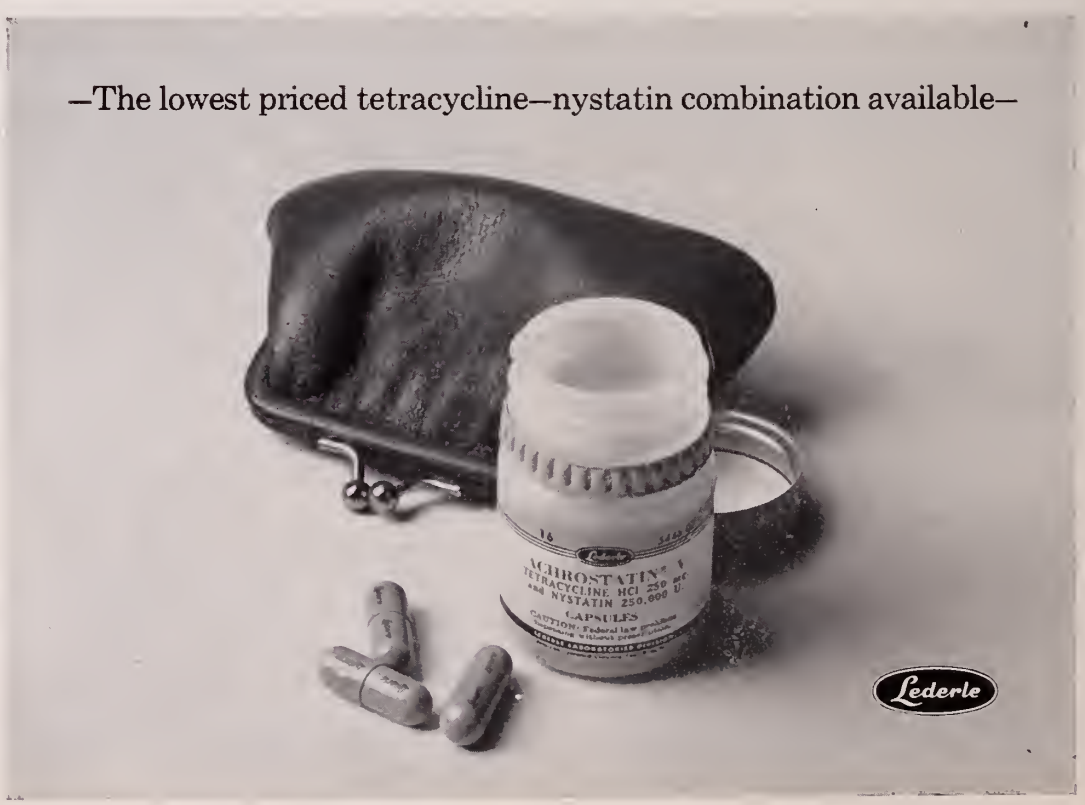
FRANZ STEWART, M.D.

Dear Editor:

I am sorry I didn't get to see you at the FMA meeting in Hollywood. I am writing to tell you, and through you all of the members of the FMA, of the very deep feeling of gratitude, warmth and appreciation that I have for the manner in which they have voluntarily extended to me all their support, encouragement and aid in my proposed nomination for the presidency-elect of the American Medical Association. Regardless of the outcome of the election, this expression of fraternity and good will has been a priceless gift from my colleagues here in Florida. I cherish it beyond words, and will for the rest of my life. It is a most humbling experience, and a debt that can never be repaid nor forgotten.

I was unable to say these things at the meeting, but find it easier to put down in a letter, and to say thanks again to those many wonderful friends.

JERE W. ANNIS, M.D.





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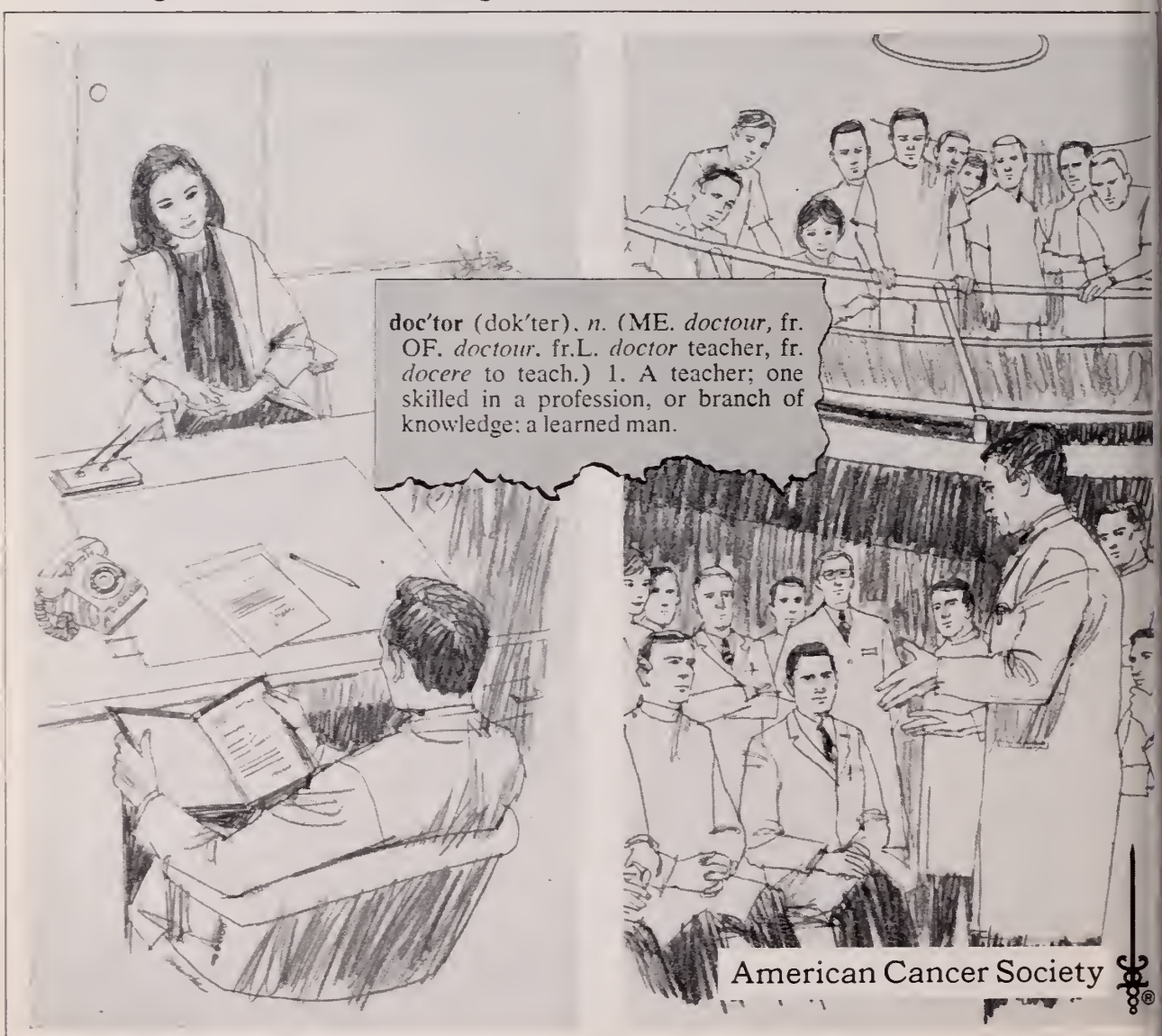
The Doctor

One of the doctor's most important roles is in education.

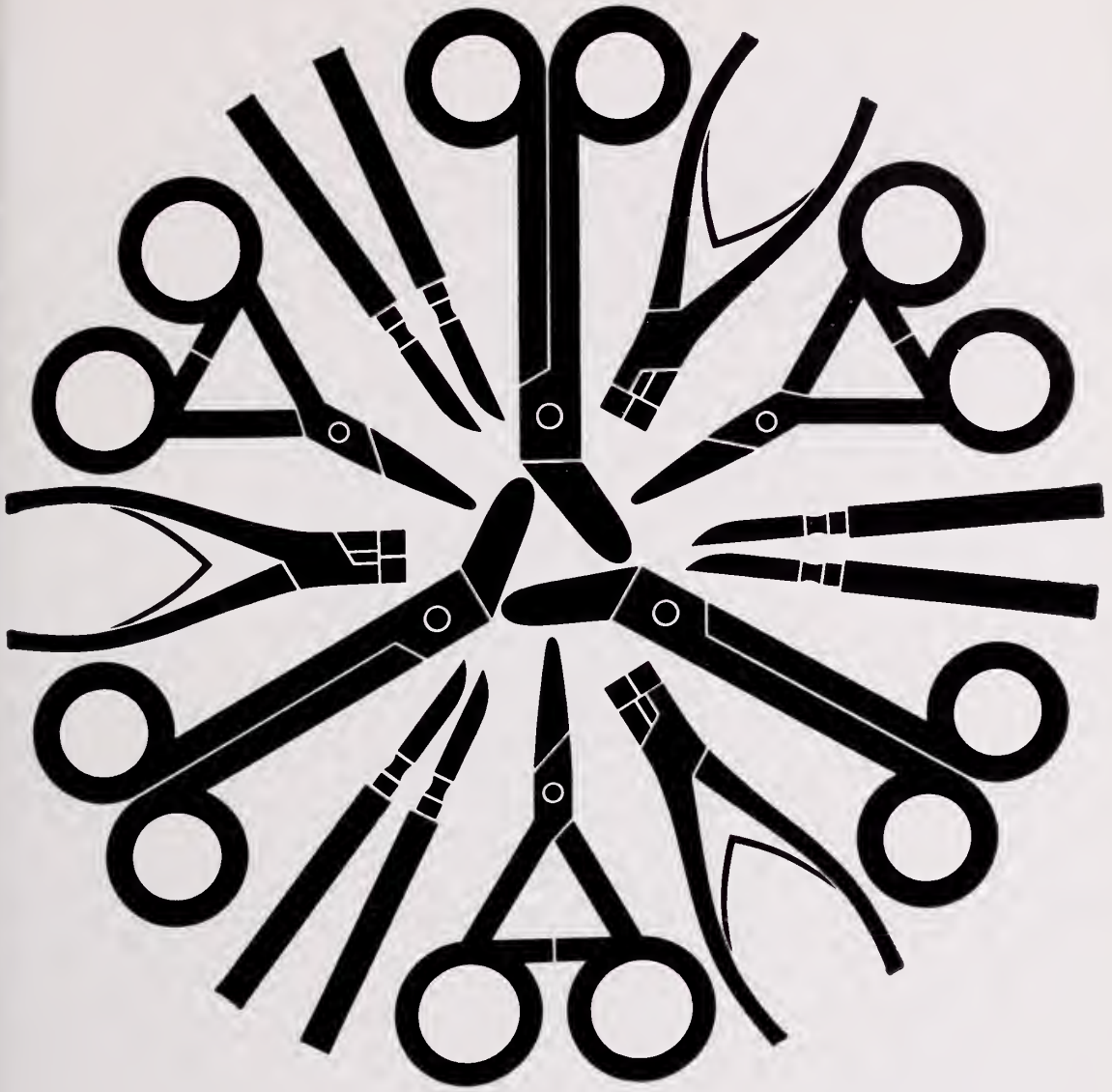
For his patients, the doctor provides the facts, supplies the rationale, triggers the action for life-saving health practices. To his students, he passes on his knowledge and the benefits of his clinical experience. With his colleagues, he shares new information and concepts.

Assisting the doctor in his teaching role is a major function of our professional educa tion program. Through medical conference films, exhibits, pamphlets, monographs an other publications, we provide him with th most important and current information o cancer.

If, as Henry Brooks Adams speculated, "A teacher affects eternity; he can never te where his influence stops", the outlook i optimistic.



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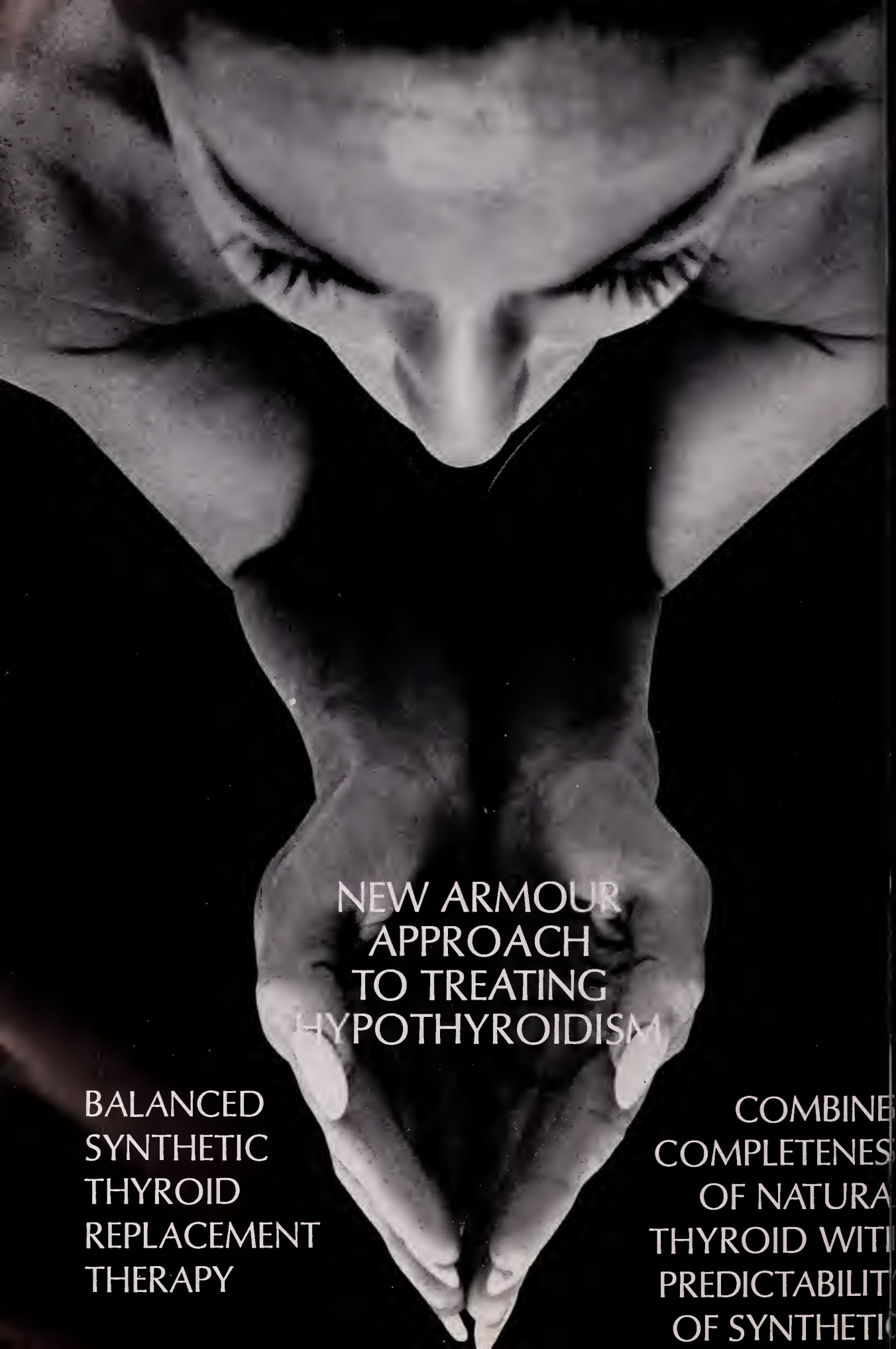
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SODIUM LIOTHYRONINE (T_3) AND SODIUM LEVOTHYROXINE (T_4)

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Thyrolar -½	½ gr.	0.05 mg.	12.5 mcg.
Thyrolar -1	1 gr.	0.1 mg.	25 mcg.
Thyrolar -2	2 gr.	0.2 mg.	50 mcg.
Thyrolar -3	3 gr.	0.3 mg.	75 mcg.

Each Thyrolar-1 contains 50 mcg. sodium levothyroxine and 12.5 mcg. sodium liothyronine

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NEW Thyrolar®
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COMPOSITION: Thyrolar® (Liotrix, Armour) tablets provide a combination of the synthetic active thyroid hormones, sodium levothyroxine (T_4) and sodium liothyronine (T_3), in a ratio of 4 to 1 by weight. Available in 4 potencies approximately equivalent in therapeutic effect to ½ gr., 1 gr., 2 gr. or 3 gr. desiccated thyroid. Each Thyrolar-1 contains 50 mcg. sodium levothyroxine and 12.5 mcg. sodium liothyronine.

CONTRAINDICATIONS: Thyrotoxicosis, acute myocardial infarction, and in the presence of uncorrected adrenal insufficiency.

WARNINGS: Use with caution in patients with cardiovascular disease, including hypertension. Development of chest pain or other aggravation of cardiovascular disease requires decrease in dosage.

Injection of epinephrine in patients with coronary artery disease may precipitate an episode of coronary insufficiency. This may be enhanced in patients receiving thyroid preparations. Careful observation is required if catecholamines are administered to patients in this category. Thyrolar®-treated patients with concomitant coronary artery disease should be carefully observed during surgery since the possibility of precipitating cardiac arrhythmias may be greater in patients treated with thyroid hormones.

Thyroid replacement therapy may potentiate anticoagulant effects with agents such as warfarin or bishydroxycoumarin and reduction of one-third in anticoagulant dosage should be undertaken upon initiation of Thyrolar® therapy. Subsequent anticoagulant dosage adjustment should be made on basis of frequent prothrombin determinations.

In patients whose hypothyroidism is secondary to hypopituitarism, adrenal insufficiency will probably also be present. When the adrenal insufficiency and hypothyroidism coexist, the adrenal insufficiency should be corrected by corticosteroids before administering thyroid hormones.

PRECAUTIONS: Treatment should begin with small doses and increments should be gradual. In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents. Conversely, decreasing the dose of thyroid hormone may cause hypoglycemic reactions if the dosage of insulin or oral agents is not adjusted.

ADVERSE REACTIONS: The effects of overdosage include weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat, fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute at a lower dosage.

In a few individuals who are euthyroid on Thyrolar®, headache may appear. Dosage should be decreased. If headache persists or the patient develops signs of hypothyroidism on the lower dosage, another thyroid preparation should be substituted.

DOSAGE: Generally, the initial adult dosage in untreated hypothyroid individuals is 1 tablet of Thyrolar-½ daily; increased in increments of 1 tablet of Thyrolar-½ every 1 or 2 weeks until patient is euthyroid. In children, increments in dosage should be made every 2 weeks. In patients previously rendered euthyroid with desiccated thyroid, sodium levothyroxine or sodium liothyronine, each Thyrolar-1 tablet will usually replace 1 grain of desiccated thyroid.

AVAILABLE: Bottles of 100 two-layered, compressed tablets in 4 potencies:

	Each Tablet Contains:		Armacode™ Markings	Approx. Equiv. in Desiccated Thyroid
	T_4*	T_3**		
Thyrolar-½	25 mcg.	6.25 mcg.	YD	½ gr.
Thyrolar-1	50 mcg.	12.5 mcg.	YE	1 gr.
Thyrolar-2	100 mcg.	25 mcg.	YF	2 gr.
Thyrolar-3	150 mcg.	37.5 mcg.	YH	3 gr.

*sodium levothyroxine **sodium liothyronine

Armour Pharmaceutical Company
Chicago, Illinois 60690

Medical Licenses Granted

The Florida State Board of Medical Examiners report that of the 1,043 applicants who took the examination of the Board held January 19-20, 1970, at Jacksonville, 709 passed and have been issued licenses to practice medicine in Florida. The names, towns, medical school and year of graduation of the successful applicants follow:

Abadal, Rafael P., St. Petersburg (U. of Havana, 1954)
Abel, William G., E. Hampton, N. Y. (Columbia P&S, 1947)
Acosta, de Valdes A., Miami (U. of Havana, 1951)
Aderhold, Richard M., Gainesville (U. of North Carolina, 1965)
Agin, Jack G., Massapequa Park, N. J. (U. of Washington, 1961)
Agustino, Manuel, Miami Beach (U. of Havana, 1944)
Akin, John R., Pensacola (Tulane U., 1966)
Aldhizer, Theodore G., Key West (Medical College of Virginia, 1968)
Alexander, James F., Jacksonville (McGill U., 1963)
Alfonso, Jose G., Beckley, W. Va., (U. of Havana, 1946)
Alfonso, Nicolas R., Winter Haven (U. of Havana, 1949)
Allen, James R., New Orleans, La. (Tulane U., 1968)
Alley, Thomas W., Indianapolis, Ind. (Indiana U., 1963)
Alonso, Jorge P., Garfield Heights, Ohio (U. of Havana, 1943)
Alvarez, Miguel M., Miami (U. of Havana, 1917)
Amable, Julio P., Arcadia (U. of Havana, 1945)
Amalong, Ronald J., Maitland (U. of Pittsburgh, 1961)
Ackerbaum, Ronald J., Aberdeen, Md. (U. of Lausanne, 1966)
Amos, Eric H., Gainesville (L. S. U., 1966)
Anderson, William E., Satellite Beach (U. of Wisconsin, 1963)
Andre, Philip G., Memphis, Tenn. (U. of Tennessee, 1964)
Andrews, Herbert, Jacksonville (Emory U., 1965)
Angell, Franklin L., Concord, Mass. (Medical College of Virginia, 1947)
Apter, Ronald A., Falls Church, Va. (George Washington U., 1958)
Arnold, Stuart N., Rockville Centre, N. Y. (Boston U., 1968)
Arrabal, Juan C., Baltimore, Md. (U. of Havana, 1944)
Arteaga, Lorgio F., Tonawanda, N. Y. (San Simon U., 1962)
Ary, Aron, Coral Gables (Mexico National School of Medicine, 1960)
Atwood, John W., Gainesville (U. of Tennessee, 1958)
Avery, Frank W., Jacksonville (U. of North Carolina, 1967)
Aviles, Mario R., Miami (U. of Havana, 1940)
Avner, Ted G., Tampa (U. of Tennessee, 1968)
Aylsworth, Arthur S., Gainesville (U. of Pennsylvania, 1967)

Bagby, Richard J., Decatur, Ga. (Emory U., 1966)
Baker, Ralph E. Jr., Charleston, S. C. (U. of South Carolina, 1963)
Baker, Stephen R., W. Hempstead, N. Y. (Albert Einstein, 1968)
Barnes, Mack N. Jr., Memphis, Tenn. (U. of Tennessee, 1964)
Baro, Cesar, Orlando (U. of Havana, 1954)
Bashore, Sidney M., Patrick AFB (Jefferson Medical College, 1947)
Bayarri, Vincent, Babylon, N. Y. (Valencia Medical School, 1952)
Befeler, Benjamin, Miami Beach (U. of Mexico, 1963)
Bejar, Rafael L., King of Prussia, Pa. (U. of Havana, 1961)
Beltranena, Humbert J., Gainesville (U. of Havana, 1945)
Bendler, Carl H., Sanford (U. of Louisville, 1929)
Benjamin, Michael J., Little Neck, N. Y. (U. of New York, 1967)
Beraha, Dan, Miami Springs (U. of New York, 1968)
Berens, Sanford V., Redstone Arsenal, Ala. (Dalhousie U., 1965)
Berkebile, Robert D., Grafton, Ohio (Ohio State U., 1939)
Bernstein, Jeffrey A., Atlanta, Ga. (Medical College of Virginia, 1968)
Berson, Michael J., New York, N. Y. (Albert Einstein, 1968)
Bianco, Charles C., Henrietta, N. Y. (New York Medical College, 1964)
Biber, Michael P., Sarasota (U. of Chicago, 1967)
Birken, Eric A., Valley Stream, N. Y. (Boston U., 1968)
Birnbaum, Jon J., Charlottesville, Va. (Tufts U., 1960)
Blaine, George, Coral Gables (U. of Berlin, 1936)
Bland, Kirby I., Gainesville (Medical College of Alabama, 1968)
Blaydes, Robert M. Jr., Orlando (Louisiana State U., 1948)
Bloom, William, New York, N. Y. (New York Medical College, 1935)
Bohn, Barry A., Fort Lauderdale (Tulane U., 1967)
Bono, Joseph A., New York, N. Y. (New York Medical College, 1965)
Borota, Ray W., Patrick AFB (Wayne State U., 1966)
Bosch, Myriam A., Miami (U. of Havana, 1953)
Boyer, Samuel H., Chestnut Hill, Mass. (Tufts U., 1936)
Brachfeld, Norman, New York, N. Y. (Washington U., 1953)
Bradford, Michael J., Montgomery, Ala. (Harvard U., 1964)
Brady, Patrick G., Gainesville (New Jersey College of Medicine, 1968)
Brannan, Carl D., New York, N. Y. (Tulane U., 1946)
Bransfield, James J., Chicago, Ill. (Loyola U., 1957)
Bricker, Lee A., Miami (U. of Pennsylvania, 1962)
Brodkin, Bonnie Joy S., Forest Park, Ill. (U. of Illinois, 1968)
Brodkin, Jerome P., Forest Park, Ill. (U. of Illinois, 1966)
Brodsky, Sidney J., Cockeysville, Md. (U. of New York, 1963)
Brown, Gerald J., Fort Lauderdale (U. of New York, 1948)
Brown, Harry J., Fort Walton Beach (U. of Maryland, 1965)
Brown, Richard M., Marietta, Ga. (Columbia U., 1962)
Brown, Robert G., Pensacola (Duke U., 1966)
Brumley, Thomas B., St. Petersburg (Ohio State U., 1967)
Brunt, Gwynne T. Jr., Atlanta, Ga. (Emory U., 1966)
Bukanz, Seymour L., Mt. Vernon, N. Y. (Bellevue Hospital Medical College, 1933)
Bullock, John D., Atlantic Beach (Harvard U., 1968)
Burge, Kelmar M. Jr., Rochester, Minn. (U. of Kansas, 1963)
Burleson, William R., Gainesville (U. of North Carolina, 1964)
Burnette, Harold W., Johnson City, Tenn. (Medical College of Virginia, 1961)
Burson, Leonard C., Pompano Beach (St. Louis U., 1939)
Burt, Robert C., Cincinnati, Ohio (U. of Cincinnati, 1953)
Butcher, David R., Sarasota (Emory U., 1968)
Butler, Michael B., Philadelphia, Pa. (Howard U., 1963)

Cabrera, Lidia del C., Miami (U. of Havana, 1960)
Cabrera, Luis A., Miami (U. of Havana, 1946)
Cabreza, Ronaldo A., Hamilton, Ohio (Far Eastern U. College of Medicine, 1962)

Camelo, Anthony, Key Biscayne (National U. School of Medicine, Columhia, 1948)
Campbell, Stephen B., Milton (U. of Oklahoma, 1968)
Canals, Juan R., APO New York (Madrid U., 1962)
Canosa, Jose, Miami (U. of Havana, 1929)
Caplan, Stephen R., Miami (U. of Virginia, 1966)
Carmouze, Arnaldo, Miami (U. of Salamanca, 1966)
Corothers, John A., Atlanta, Ga. (U. of Mississippi, 1963)
Caruso, Phillip A., Brooklyn, N. Y. (Howard U., 1964)
Casanova-Roig, Ramon, Biloxi, Miss. (Temple U., 1960)
Casey, Peter N., Lighthouse Pt. (Marquette U., 1961)
Caso, Roherto A., Orlando (U. of Havana, 1957)
Castello, Carlos R., Johnson City, Tenn. (U. of Havana, 1951)
Castillo, Jose L., Memphis, Tenn. (U. of Salamanca, 1965)
Castronuovo, Joseph J., Fort Bragg, N. C. (Georgetown U., 1964)
Chakmakis, George A., Miami (Basel U., 1967)
Chance, Jeffrey A., Hewlett, N. Y. (Chicago Medical School, 1966)
Chase, Robert E. Miramar (Marquette U., 1967)
Chasin, Hila L., New York, N. Y. (New Jersey College of Medicine, 1968)
Chatham, Louis S., Yazoo City, Miss. (Louisiana State U., 1953)
Chatzinoff, Albert B., Palm Beach (Chicago Medical School, 1948)
Chinitz, Allen, Hialeah (U. of New York, 1961)
Christensen, James A., Tampa (Indiana U., 1968)
Christmas, Dewey A. Jr., New Haven, Conn. (Yale U., 1965)
Clore, Forrest C., Gainesville (U. of Michigan, 1962)
Cohen, Harry, Baltimore, Md. (U. of Maryland, 1943)
Cohen, Ora Richard, Silver Spring, Md. (U. of Maryland, 1966)
Colvin, Robert C., Evansville, Ind. (Indiana U., 1955)
Connolly, Hugh J., Miami (Georgetown U., 1965)
Cosio, Jose M., Grosse Pt. Woods, Mich. (U. of Havana, 1955)
Crittenden, Joseph J., Crawfordsville, Ind. (U. of Illinois, 1959)
Crockett, Robert N. Jr., Memphis, Tenn. (U. of Tennessee, 1951)
Cruz, Serfio L., Columhus, Ohio (U. of Havana, 1949)
Cushman, Phillip W., Gainesville (Indiana U., 1966)
Custer, Leroy E., Baltimore, Md. (Johns Hopkins, 1965)
Cutts, William G. Jr., Jacksonville (Medical College of Georgia, 1965)
Cypert, Harold S., Homestead AFB (U. of Utah, 1966)

Da Silva, Ercio M., Columhia, S. C. (U. Minas Gerais, 1949)
Daversa, Joseph J. Jr., Miami (U. of Miami, 1968)
Davidoff, Manuel A., Fort Wayne, Ind. (Rush Medical School, 1937)
Davidoff, Robert A., Miami (New York U., 1958)
Davis, David D., Jacksonville (George Washington U., 1968)
De Castro, Raul F., Baltimore, Md. (U. of Havana, 1941)
De Lamerens, Sergio A., Memphis, Tenn. (U. of Havana, 1953)
del Rosario-Cervoni, Ruben, Des Moines, Iowa (U. of Barcelona, 1963)
De Miranda, Edward G., Miami (U. of Havana, 1954)
DePoyster, James H., Pascagoula, Miss. (U. of Mississippi, 1964)
De Rango, Frank J., Plantation (U. of Illinois, 1954)
Dershewitz, Norman J., Silver Spring, Md. (Georgetown U., 1968)
Diamond, Daniel, Forest Hills, N. Y. (U. of Louisville, 1932)
Diaz, Higinio G., Miami (U. of Salamanca, 1964)
Dick, Arthur R., South Miami (U. of Maryland, 1965)
Dieguez, Eduardo, Pensacola (U. of Havana, 1946)
Dinnerstein, Allan J., Pensacola (Albert Einstein, 1964)
Dodt, Robert W., Slingerlands, N. Y. (Albany Medical School, 1967)
Dominguez, Felipe M., Camhridge, Md. (U. of Havana, 1953)
Donshik, Peter C., Rockville, Md. (New York Medical College, 1968)
Dorr, Lawrence D., Jacksonville (U. of Iowa, 1967)
Dosik, Michael H., San Antonio, Texas (Cornell U., 1966)
Douglass, William P., Tampa (Indiana U., 1968)
Dowlen, Leonidas W. Jr., Coconut Grove (Vanderbilt U., 1968)
Dryfuss, John A. Jr., Meridian, Miss. (New York Medical College. 1966)
Duane, Lawrence J. Jr., Pensacola (Medical College of Georgia, 1967)
Dunn, Albert A., New York, N. Y. (Cornell U., 1943)
Dupin, Charles L., Milton (Tulane U., 1968)

Eardley, Robert J., Little Rock, Ark. (U. of Arkansas, 1960)
Eckart, James R., Jacksonville (U. of Tennessee, 1964)
Eckersley, John W. Jr., Fort Walton Beach (Temple U., 1962)
Edelsohn, Lanny, Tampa (Hahnemann U., 1967)
Edelstein, Josef, Shaker Heights, Ohio (U. of Havana, 1954)
Ekstrand, Richard W., St. Petershurg (U. of Illinois, 1943)
Elbualy, Musallam S., Miami (U. of Durham, 1960)
Elias, Juan J., Bartow (U. of Havana, 1957)
Eliscu, Edward H., Maitland (Chicago Medical School, 1965)
Ellis, Edward A., Jacksonville (U. of Minnesota, 1963)
Ellwood, Leslie C., Gaithersburg, Md. (U. of Florida, 1968)
Engebretsen, Bery J., Miami (U. of Iowa, 1967)
Estrada, Antonio M., Randallstown, Md. (U. of Havana, 1952)

Fahlstrom, Stanley Charles W., Evanston, Ill. (U. of Illinois, 1925)
Fancy, Henry F., APO New York (McGill U., 1945)
Fass, Paul T., Bronx, N. Y. (New York Medical College, 1965)
Fegen, Joseph P. Jr., Cleveland, Ohio (Cornell U., 1963)
Felipe-Perea, Evelio A., Baltimore, Md. (U. of Havana, 1948)
Felman, Alvin H., Gainesville (U. of Cincinnati, 1955)
Ferayorni, Julian J., Brooklyn, N. Y. (New York Medical College, 1968)
Fernandez, Amado F., Waterford, Conn. (U. of Havana, 1960)
Fernandez, Andres R., Milledgeville, Ga. (U. of Havana, 1960)
Fernandez, Joaquin J., Miami (U. of Havana, 1954)
Fernandez, Manuel A., Evergreen Park, Ill. (U. of Havana, 1957)
Fernandez, Rafael, Evergreen Park, Ill. (U. of Havana, 1957)
Fernandez-Bordenave, Carlos, Miami (U. of Havana, 1947)
Fevrier, Alfred, Miami (U. of Florida, 1968)
Fiedelholtz, Franklin, Atlanta, Ga. (U. of New York, 1963)
Fiedler, George A. Jr., Orlando (U. of Arkansas, 1968)
Findeiss, James Clifford, Jacksonville (Northwestern U., 1968)
Fine, Stuart L., Gainesville (U. of Maryland, 1966)
Finkell, Lawrence J., Birmingham, Mich. (Chicago Medical College, 1948)
Fiscella, Kenneth R., Pensacola (New Jersey College of Medicine, 1967)
Fish, James C., Logansport, Ind. (Indiana U., 1943)
Fisher, Vaughn L. Jr., Bowling Green, Ky. (U. of Tennessee, 1954)
Flanigan, Donald J., Pensacola (Hahnemann U., 1967)
Fleites, Jose O., Ironton, Ohio (U. of Havana, 1943)
Flint, George W., Old Westbury, N. Y. (Long Island College, 1944)
Folsom, Charles T., Garland, Texas (U. of Oklahoma, 1965)
Fox, Brendan M., Windsor, Conn. (Tufts U., 1955)

Fras, Ivan, Binghamton, N. Y. (U. of Zagreb, 1961)
Frederick, Robert A., Charlotte, N. C. (Harvard U., 1968)
Friedman, Franklin P., Miami Beach (Albert Einstein, 1967)
Friedman, Stephen J., Orlando (Boston U., 1966)
Fuller, Earl W., Jr., Gainesville (Medical College of Virginia, 1968)
Furman, John R., New Orleans, La. (Albany Medical College, 1962)
Fusco, Frank D., Vienna, Va. (Georgetown U., 1958)

Gamarra, Miguel, Miami (U. of San Marcos, 1957)
Garcia, Jorge P., Miami (U. of Salamanca, 1966)
Gardner, Robert A., New York, N. Y. (U. of New York, 1966)
Garmendia, Jose M., Miami (U. of Havana, 1930)
Garst, Walter P., Miami (U. of Virginia, 1960)
Garvin, Ronald M., Bowling Green, Ky. (U. of Louisville, 1965)
Gasset, Antonio R., Gainesville (Boston U., 1966)
Gerber, Norman A., Brooklyn, N. Y. (Buffalo State U., 1964)
Gerson, Robert E., Fort Sill, Okla. (U. of Cincinnati, 1966)
Gilbert, Clyde D., Tampa (U. of Virginia, 1963)
Ginoris, Luis, Hialeah (U. of Havana, 1960)
Ginsberg, Benjamin H., Chicago, Ill. (Loyola U., 1949)
Glassman, Armand B., Gainesville (Georgetown U., 1964)
Glatt, William, Savannah, Ga. (New York Medical College, 1964)
Glazer, Norman, Louisville, Ky. (U. of Louisville, 1952)
Goldberg, Richard I., New York, N. Y. (Chicago Medical School, 1961)
Golden, Cora S., Louisville, Ky. (U. of Louisville, 1966)
Golden, Terry D., Gainesville (U. of North Carolina, 1968)
Goldenberg, Alan L., Omaha, Neb. (State U. of New York, 1963)
Goldman, Edward E., Tucker, Ga. (U. of Miami, 1968)
Gonzalez, Luis, Decatur, Ga. (U. of Louisville, 1953)
Gosselin, Arthur J., Miami Shores (Ottawa U., 1958)
Gowen, James F., Jacksonville (Medical College of Georgia, 1968)
Grabiel, Amado, Grosse Pointe Woods, Mich. (Emory U., 1941)
Grant, Alfred A., Durham, N. C. (Medical College of Alabama, 1965)
Grassl, Ferdinand O., River Falls, Wis. (U. of Wisconsin, 1955)
Grebin, Burton, Jamaica, N. Y. (New York Medical College, 1966)
Green, James W., Key Biscayne (Vanderbilt U., 1962)
Greenlee, James R., Jacksonville (Indiana U., 1966)
Greenwald, Gerald, Savannah, Ga. (Howard U., 1967)
Griffin, Harold L., Columbus, Texas (U. of Texas, 1960)
Grippo, Allen E., Raleigh, N. C. (Temple U., 1962)
Groover, Jack R., Miami (U. of Maryland, 1968)
Grossman, Irwin, Great Neck, N. Y. (U. of New York, 1968)
Grossman, Melvyn L., Gainesville (U. of Geneva, 1960)
Guerra, Benjamin, Mansfield, Ohio (U. of Havana, 1951)
Guerra, Gerardo R., Dupo, Ill. (U. of Havana, 1954)
Guerra, Jorge R., Gainesville (U. of Havana, 1952)
Guerra, Rolando G., Dupo, Ill. (U. of Havana, 1955)
Gulden, Peter J. Jr., Miami Springs (U. of Pennsylvania, 1965)
Gunn, Albert E., New York, N. Y. (National U. of Ireland, 1967)
Guthrie, Fred A., Gretna, La. (U. of Tennessee, 1963)
Gutierrez, Armando L., Lakeland (U. of Havana, 1965)
Gutierrez, Luis A., Tampa (U. of Madrid, 1959)
Gutlohn, Paul A., Bridgeton, N. J. (Hahnemann U., 1960)
Guy, Clifford R., Gainesville (New Jersey College of Medicine, 1967)

Habenicht, Herald A., Miami (Loma Linda U., 1958)
Hall, William H. Jr., Springfield, Va. (U. of Virginia, 1962)
Halpern, Barry L., Baltimore, Md. (U. of Pennsylvania, 1963)
Hansberry, William E., Jacksonville (U. of Miami, 1966)
Hardy, Charles A., Gainesville (U. of Missouri, 1967)
Harris, Clarence M., Pensacola (U. of Miami, 1968)
Harsa, Richard J., Shalimar (Western Reserve U., 1961)
Harwell, Edward L., Southfield, Mich. (Wayne State U., 1962)
Hawkins, Crawford T., Streator, Ill. (U. of Illinois, 1948)
Held, Berel, Gainesville (Tulane U., 1962)
Hendra, Richard I., Warren, Mich. (Wayne State U., 1964)
Henley, Chapin, Charlotte, N. C. (U. of Florida, 1968)
Hernandez, Carlos M., Raiford (U. of Havana, 1961)
Hernandez, Julio D., Atlanta, Ga. (U. of Havana, 1953)
Herschmann, Elias M., San Antonio, Texas (U. of New York, 1963)
Hess, Ardo M., Rockford, Ill. (State U. of Iowa, 1939)
Hess, Richard J., Fort Dix, N. J. (Temple U., 1963)
Hinds, Ronald B., Fort Sam Houston, Texas (St. Louis U., 1959)
Hoagland, Thomas V., Fort Myers Beach (Iowa College of Medicine, 1938)
Hobby, Charles F., Savannah, Ga. (Medical College of Georgia, 1967)
Hodges, Jeff A., Gainesville (U. of Mississippi, 1958)
Holfelder, Lawrence A., Key West (Albany Medical College, 1965)
Holland, Henry L., Bartow (U. of Florida, 1968)
Holly, Eugene H., Gainesville (U. of Cologne, 1962)
Holsinger, James W. Jr., Gainesville (Duke U., 1964)
Holsworth, Michael C., Gainesville, (U. of Miami, 1968)
Hopping, Richard A., Livingston, N. J. (Long Island College of Medicine, 1939)
Horowitz, Roy H., Bronx, N. Y. (U. of Louvain, 1968)
Horwitz, Jeffrey A., Gainesville (U. of Cincinnati, 1966)
Hosty, Thomas A., Birmingham, Ala. (U. of Alabama, 1966)
Howard, Merton L. Jr., Littleton, Colo. (St. Louis U., 1956)
Howell, Harry S. Jr., Lexington, Ky. (Bowman Gray School of Medicine, 1968)
Howell, James T., Palm Springs (New York Medical College, 1966)
Hughes, Jay M., Bolton, Conn. (Jefferson Medical College, 1958)
Hunt, John L., Campbell, Mo. (U. of Missouri, 1963)

Ibach, John R. Jr., Gainesville (U. of Rochester, 1959)
Illel, Jaime, Palos Heights, Ill. (U. of Havana, 1956)
Inchausti, Beria C., Miami (U. of Salamanca, 1967)
Insoft, Joseph, Baltimore, Md. (Washington U., 1963)
Inwood, Louis R., Brooklyn, N. Y. (Eclectic Medical College of Cincinnati, 1939)
Ipp, Herman H., Youngstown, Ohio (Ohio State U., 1935)
Isbell, Robert G., Tampa (U. of Michigan, 1964)

Jackson, Lawrence R., Titusville (U. of Tennessee, 1961)
Jacobs, William R., Phillipsburg, N. J. (Jefferson Medical College, 1954)
Jacobsen, Leif Y., Marco Island (Cornell U., 1932)
Jaffe, Herbert, Brooklyn, N. Y. (U. of Louvain, 1968)
Jaffe, Ronald J., West Islip, N. Y. (New York U., 1955)
Jasper, Stephen T., Pensacola (U. of Louisville, 1967)
Jenkins, Douglas O., Gainesville (U. of Florida, 1968)
Jimenez, Salvador, Jacksonville (U. of Michigan, 1963)
John, David A., Chicago, Ill. (Northwestern U., 1966)
Johnson, Glover O'Hara L. Jr., Kansas City, Mo. (Meharry Medical College, 1966)
Johnson, James C., Orlando (Marquette U., 1964)
Johnson, Thomas F., Orlando (U. of Toronto, 1966)
Johnson, Wayne R., Hollywood (U. of Miami, 1968)
Joiner, Daryl W., Gainesville (Medical College of Georgia, 1967)
Jones, Barry N., Decatur, Ga. (Emory U., 1968)
Jones, Harry B., Trenton, N. J. (Seton Hall College of Medicine, 1964)
Jones, Raymond S., Redstone Arsenal, Ala. (U. College of West Indies, 1961)
Joseph, George M., Savannah, Ga. (Emory U., 1968)

Kahan, William L., Brooklyn, N. Y. (U. of Lausanne, 1954)
Kahn, Howard L., Indianapolis, Ind. (Indiana U., 1939)
Kamhi, Bernard, Brooklyn, N. Y. (U. of New York, 1951)
Kanter, Julian R., Norwood, Mass. (U. of Cincinnati, 1962)
Karlin, Neil J., Miami (Tufts Medical School, 1965)
Karol, Herbert J., Fort Wayne, Ind. (U. of Illinois, 1942)
Kasper, Harvey A., Key West (New York U., 1964)
Kennedy, Thomas E., Laughlin AFB, Texas (Medical College of Georgia, 1967)
Khakee, Abdulaziz G., Concord, N. H. (Grant Medical College, Bombay, India, 1954)
Kiely, John A., Nashville, Tenn. (Vanderbilt, 1967)
Kiley, James D., Fern Park (Emory U, 1967)
Kirkham, William R., Edison, N. J. (U. of Oklahoma, 1960)
Klein, Harvey S., Huntington, W. Va. (U. of Cincinnati, 1946)
Kleinman, Steven Z., Larchmont, N. Y. (Chicago Medical School, 1966)
Klus, Veronica M., Pittsburgh, Pa. (Marquette U., 1956)
Kohn, Anthony, Islip, N. Y. (Tufts Medical College, 1931)
Kolczun, Michael C., University Heights, Ohio (Louisiana State U., 1968)
Korn, Wallace, Miami (Tulane U., 1945)
Korsower, Allan J., Orange Park (U. of Illinois, 1966)
Kowal, Roland A., Oak Park, Ill. (Chicago Medical School, 1952)
Kowaleski, Robert E., Miami (Georgetown U., 1965)
Kramer, Lloyd I., Shaw AFB, S. C. (U. of Maryland, 1966)
Krehbiel, Susannah, Deerfield Beach (Cornell U., 1947)
Krellenstein, Daniel, New York, N. Y. (State U. of New York, Buffalo, 1964)
Kress, Sidney C., Brooklyn, N. Y. (U. of North Carolina, 1966)
Kruger, Leon E., Coral Gables, (Boston U., 1951)
Kullman, George L., Rochester, Minn. (U. of Alberta, 1960)
Kurth, Charles J., Newsfields, N. H. (Indiana U., 1959)
Kushner, Kenneth H., Brooklyn, N. Y. (State U. of New York, Syracuse, 1962)

Lackore, Leonard K., Gainesville (U. of Iowa, 1958)
Lahue, William C., Tampa (U. of Missouri, 1962)
Lajara, Carlos M., Arlington Heights, Ill. (U. of Santo Domingo, 1953)
Landa, Jose F., Miami (U. of Madrid, 1965)
Lane, William K., Jacksonville (Medical College of Georgia, 1959)
Lang, Anthony E., Delmar, N. Y. (New York Medical College, 1957)
Lang, William C. Jr., Tampa (Emory U., 1968)
Lara, Enrique, Melrose Park, Ill. (U. of Havana, 1955)
Lara, Jose V., St. Augustine (U. Del Valle, Columbia, 1962)
Lasseter, Kenneth C., Lexington, Ky. (U. of Florida, 1967)
Lawler, Joel P., Carthage, N. Y. (Albany Medical College, 1965)
Lawson, William G., Orlando (U. of Texas, 1939)
Leiser, Jack, Mineola, N. Y. (U. of Louvain, 1966)
Leo, Frank J., E. Hartford, Conn. (Marquette U., 1946)
Lessin, David E., Aberdeen, Md. (Hahnemann Medical School, 1964)
Leverett, Faye L., Miami Beach (Western Reserve U., 1968)
Levine, Norman S., Bronx, N. Y. (Harvard U., 1966)
Levine, Michael S., Atlanta, Ga. (Ohio State U., 1968)
Levinson, Robert L., Brooklyn, N. Y. (U. of New York, 1968)
Levy, Norman S., Chicago, Ill. (Western Reserve U., 1965)
Lewis, John N., Gainesville (Johns Hopkins, 1968)
Leyte-Vidal, Santiago, Aberdeen, Md. (U. of Havana, 1951)
Leyva, Horacio A., Islamorada (U. of Madrid, 1963)
Lifshutz, Howard L., New York, N. Y. (New York Medical College, 1967)
Limcangco, Delfin G., Raiford (St. Thomas U. Philippines, 1953)
Linares, Edmee, Hollywood (U. of Havana, 1946)
Lindsay, August V., Atlanta, Ga. (U. of Utah, 1965)
Lindsay, Mark B., FPO New York, N. Y. (U. of Texas, 1967)
Linkous, Clayton E. Jr., Pensacola (West Virginia U., 1966)
Lipman, Richard L., San Antonio, Texas (U. of Pittsburgh, 1966)
Littleford, Philip O., Nashville, Tenn., (Johns Hopkins, 1965)
Londono, Javier H., Gainesville (U. of Antioquia, 1963)
Long, John C., Rochester, Minn. (U. of Michigan, 1966)
Long, William D., Atlanta, Ga. (Emory U., 1962)
Lopez, Fernando A., Chicago, Ill. (U. of Madrid, 1962)
Lopez, Juan A., Port Reading, N. J. (U. of Havana, 1946)
Lopez, Juan F., Miami (U. of Havana, 1927)
Lopez, Orlando O., Atlanta, Ga. (U. of Havana, 1955)
Lorenc, Ronald B., New York, N. Y. (New York Medical College, 1968)
Lorenz, Renan A., Rio Piedras, Puerto Rico (U. of Havana, 1945)
Lowery, Russell C. II, Pineville, La. (Tulane U., 1963)
Lyons, Richard M., Fort Campbell, Ky. (Ohio State U., 1967)

Mabry, Nicholas R., Winter Park (U. of Miami, 1967)
Machado, Octabio L., Palm Springs (U. of Havana, 1928)
Mack, Francis E., Miami (Georgetown U., 1966)
Mackler, Melvin A., Richmond, Va. (Medical College of Virginia, 1963)
Maloney, Joseph D., Tampa (U. of Cincinnati, 1968)
Maltby, George L., Portland, Me. (Harvard, 1936)
Malzone, William F., Gainesville (U. of Florida, 1967)
Mangi, Richard J., Towson, Md. (U. of New York, 1967)
Mangis, Phillip, Delray Beach (George Washington U., 1966)
Mantel, Fortuna A., Miami Beach (U. of Havana, 1950)
Marcus, Lawrence I., Eglin AFB (U. of Louvain, 1967)
Mark, Morton F., New York, N. Y. (U. of Chicago, 1933)
Marmar, Joel L., Bala Cynwyd, Pa. (U. of Pennsylvania, 1964)
Marques, Jose I., Orlando (U. of Havana, 1955)
Marrero, Maliva J., Miami (U. of Havana, 1959)
Martinez, Alvaro I., Miami (Javeriana U. Bogota, Columbia, 1959)
Maskin, Mayer H., Gainesville (Wayne State, 1935)
Matheson, Ian L., Tampa (Queen's U., Canada, 1957)
Mattina, Peter J. Jr., Gales Ferry, Conn. (Emory U., 1968)
Maxfield, William S., New Orleans, La. (Baylor U., 1954)
Mayl, Nathan, Gainesville (Stanford U., 1965)
Mays, Ralph W., Philadelphia, Pa. (U. of Pennsylvania, 1932)
Mazzuchi, Daniel S., Jacksonville (George Washington U., 1965)
McCord, Max W. Jr., Hunter AFB, Ga. (Medical College of Alabama, 1966)
McCormick, Kenneth N., Homestead (Stritch School of Medicine, 1964)
McCraw, John B., Gainesville (U. of Missouri, 1966)
McCroskery, Hamilton M., E. Orange, N. J. (Cornell U., 1939)
McDonald, Charles D., Gretna, La. (Medical College of Georgia, 1963)
McGowan, Hugh D., Carbondale, Ill. (Washington U., 1948)
McGuigan, James E., Gainesville (St. Louis U., 1956)
McHugh, Joseph W. Jr., Tallahassee (Hahnemann U., 1933)
McKinney, Meredith, Gainesville (Indiana U., 1968)
McLaughlin, James L., Blytheville AFB, Ark. (U. of Missouri, 1967)
Meaders, Robert H., Pensacola (U. of Texas, 1959)
Mendez, Alfredo F., Miami Beach (U. of Havana, 1943)
Mendez, Salvador A., Milledgeville, Ga. (U. of Havana, 1946)
Mercuri, Pasquale A., New York, N. Y. (New York U., 1933)

Merritt, Thomas B., Orange Park (Medical College of Georgia, 1964)
Miale, August, Coconut Grove (U. of Rochester, 1955)
Michael, Ulrich F., Miami (U. of Cologne, 1962)
Mier, Manuel, Chicago, Ill. (U. of Havana, 1954)
Milera, Juan A., Miami (U. of Salamanca, 1967)
Miller, Murray J., Opa Locka (U. of New York, 1964)
Miquel, Roberto, Raiford (U. of Havana, 1945)
Mohr, Jay P., Washington, D. C. (U. of Virginia, 1963)
Monserrate, Domingo N., Fort Lauderdale (Georgetown U., 1929)
Monsour, Gary P., Irwin, Pa. (National U. of Mexico, 1962)
Montero, Rene E., Milledgeville, Ga. (U. of Havana, 1938)
Moore, Randall B., Louisville, Ky. (U. of Louisville, 1962)
Morgan, Richard A. Jr., Tampa (Tulane U., 1956)
Morton, Robert E., Columbus, Ohio (Duke U., 1968)
Mosbaugh, Phillip G., Portsmouth, Va. (Indiana U., 1963)
Mozingo, James R. Jr., Tampa (U. of Mississippi, 1967)
Muller, Alfons J., Wyncote, Pa. (Hahnemann Medical College, 1948)
Mundorff, Thomas N., New Orleans, La. (Medical College of Georgia, 1968)
Muniz, Carlos E., Gainesville (U. of Havana, 1948)
Murphy, Eugene L., Pensacola (Medical College of Virginia, 1960)
Murphy, Robert D., Wethersfield, Conn. (Tufts College, 1947)
Myerburg, Robert J., Miami (U. of Maryland, 1961)

Nadal, Florencia, Tampa (U. of Havana, 1946)
Nerness, John L., Loma Linda, Calif. (Loma Linda U., 1963)
Newman, Roger, Kincheloe AFB, Mich. (U. of Rochester, 1963)
Neyer, John H., Ashland, Ky. (Western Reserve U., 1950)
Nicgorski, Eugene J., Orlando (Boston U., 1931)
Nimetz, Allen A., Rockville, Md. (Cornell U., 1968)
Nims, Peter E., Gainesville (Ohio State U., 1964)
Ninneman, Kyl Soo A., Baltimore, Md. (Seoul Women's Medical College, 1955)
Nisonson, Ian, Sparkill, N. Y. (College of P&S, New York, 1962)
Nixon, Richard R., Concordia, Kan. (Loyola U., 1957)
Notes, Richard D., Gainesville (George Washington U., 1968)
Nugent, Grant G., Orange Park (St. Louis U., 1967)

Ochoa, Julio F., Jacksonville (Salamanca U., 1966)
O'Hurley, John G., W. Hartford, Conn. (Jefferson School College, 1952)
Olgin, Howard A., Miami (U. of Pennsylvania, 1965)
Oppenheim, Bernard E., Fort Brooke, Puerto Rico (U. of Chicago, 1963)
Oppenheim, Irwin A., Jamestown, N. Y. (U. of Geneva, 1957)
Orhon, Necdet K., Springfield, Ohio (U. of Istanbul, 1952)
Orr, Rex, Escondido, Calif. (U. of Tennessee, 1956)
Orta, David A., Miami (U. of Havana, 1929)
Orta, Martiniano L., Miami (U. of Havana, 1954)
Ortiz, Maria del C., Miami (U. of Havana, 1941)
Ortiz, Rafael, Chicago, Ill. (U. of Havana, 1960)
Osborne, Frank G., Thomasville, Ga. (Albany Medical College, 1944)

Padar, Stephen C., Buffalo, N. Y. (Cornell Medical School, 1963)
Padon, Silvia F., Miami (U. of Salamanca, 1966)
Pagan, Juan O., Eglin AFB (U. of Puerto Rico, 1964)
Paley, David H., New York, N. Y. (Cornell U., 1928)
Pallin, John L., New Orleans, La. (Louisiana State U., 1962)
Pallin, Samuel L., Big Spring, Texas (U. of New York, 1968)
Palmerola, Joaquin F., Hollywood (U. of Havana, 1947)
Panlilio, Enrique L., Jacksonville (U. of St. Tomas, 1958)
Papper, Emanuel M., Key Biscayne (New York University, 1938)
Papper, Renee W., Miami (New York University, 1945)
Parker, Donald C., Philadelphia, Pa. (Northwestern U., 1965)
Parlade, Jaime L., Cabin John, Md. (U. of Havana, 1941)
Pastis, Maritsa C., Miami Shores (West Virginia U., 1966)
Pastis, Nicholas J., Miami Shores (U. of Cincinnati, 1965)
Patrizio, Sabatino A., Arlington, Va. (Georgetown, U., 1963)
Patton, Francis M., Birmingham, Ala. (Medical College of Alabama, 1960)
Payne, John H. III, Pensacola (U. of Alabama, 1966)
Pellerano, Cesar J., Baltimore, Md. (U. of Havana, 1945)
Penichet, Rafael J., Columbia, S. C. (U. of Havana, 1945)
Perchik, Lawrence, Newton, Mass. (U. of New York, 1957)
Perez, Ana M., Radford, Va. (U. of Havana, 1949)
Perez, Delia M., Miami (U. of Havana, 1954)
Perez, Ismael L., Miami (U. of Salamanca, 1966)
Perez-Balboa, Juan A., Baltimore, Md. (U. of Havana, 1947)
Perley, Jules M., Brooklyn, N. Y. (Tufts U., 1961)
Perry, Stephen R., Memphis, Tenn. (U. of Tennessee, 1968)
Pestana, Olga A., Orlando (U. of Havana, 1946)
Peterson, Arthur W. Jr., Elmhurst, Ill. (U. of Illinois, 1953)
Peterson, Duane G., Sylvania, Ohio (U. of Cincinnati, 1961)
Petz, Thomas J., Grosse Point Shores, Mich. (Wayne State U., 1955)
Pevow, Frederick M., Portsmouth, Va. (Tulane U., 1963)
Philips, Ellen S., Mt. Vernon, N. Y. (New York Medical College, 1968)
Plauche, Wade E. III, Winter Park (Louisiana State U., 1965)
Plevy, Donald J., Staten Island, N. Y. (New York U., 1964)
Polito, Joseph M., Hallandale (New York U., 1935)
Pons, Guillermo, Chicago, Ill. (U. of Havana, 1948)
Popowitz, Leonard, Brooklyn, N. Y. (U. of New York, 1962)
Portnoy, Barry F., Hamden, Conn. (Columbia U., 1965)
Prada, Enrique S., Winter Garden (U. of Havana, 1955)
Price, Francis W., Indianapolis, Ind. (Indiana U., 1951)
Prior, William F. Jr., Aiken, S. C. (Emory U., 1950)
Privitera, Charles R. Jr., Silver Spring, Md. (Northwestern U., 1967)
Proper, Michael C., North Miami Beach (New York U., 1967)
Provosty, George H., Tampa (Louisiana State U., 1966)
Pu, Pin H., Kennett, Mo. (St. John's Medical School, 1947)
Pulido, Maria de los D., Evanston, Ill. (U. of Havana, 1956)

Quillen, Carl G., Miami (U. of Maryland, 1968)

Rader, Thomas E., Key West (U. of Texas, 1967)
Raffaelly, Nicholas R., Pensacola (Georgetown U., 1959)
Raheb, Eduardo N., St. Petersburg (U. Nacional de La Plata, 1959)
Rairigh, Donald W., Miami (U. of Maryland, 1957)
Rams, Hugo E., Miami (U. of Havana, 1952)
Rapoport, Alan M., New York, N. Y. (State U. of New York, 1966)
Rappaport, Alexander A., Norfolk, Va. (U. of Bologna, 1964)
Ratino, John M., Chevy Chase, Md. (U. of Maryland, 1964)
Rawling, Barbara B., Redington Beach (Johann Wolfgang Goethe U., 1948)
Rawling, John C., Redington Beach (U. of Western Ont., 1949)
Ray, Walker L., Wichita Falls, Texas (Emory U., 1965)
Re, Maurice J., Fort Lee, N. J. (New York Medical College, 1937)
Reber, Robert E., New York, N. Y. (Columbia U., 1962)
Reinhard, David N., Miami Beach (Howard U., 1968)
Reiser, Isaac, Skokie, Ill. (U. of Havana, 1957)

Reisman, Terence N., Durham, N. C. (Duke U., 1968)
Rennert, Owen M., Gainesville (U. of Chicago, 1961)
Reyes, Humberto R., Kings Park, N. Y. (U. of Havana, 1940)
Ricci, Mario W., Oak Lawn, Ill. (New York U., 1947)
Richard, George A., Gainesville (U. of Pittsburgh, 1961)
Rifkin, Stephen I., Columbus, Ohio (U. of Rochester, 1967)
Rinkey, Eugene, St. Paul, Minn. (U. of Minnesota, 1941)
Risco, Rafael F., St. Petersburg (U. of Havana, 1943)
Riveron, Dagoberto, Lincolnwood, Ill. (U. of Havana, 1952)
Riveron, Emilio, Chicago, Ill. (U. of Havana, 1960)
Riveron, Mario, Orlando (U. of Havana, 1957)
Rivet, Raul V., Miami (Indiana U., 1965)
Robertson, William A., Key Biscayne (Medical College of Virginia, 1964)
Robeson, James A., Birmingham, Ala. (Washington U., 1964)
Robinowitz, Max, Washington, D. C. (Georgetown U., 1961)
Robles, Emma F., Flushing, N. Y. (Universidad Nacional de Colombia, 1954)
Roby, Milton L., Valdosta, Ga. (U. of Mississippi, 1965)
Roche, William D. Jr., Pensacola (Tufts U., 1964)
Rodriguez, Clemente, Miami (U. of Havana, 1937)
Rodriguez, Rafael D., San Juan, Puerto Rico (U. of Salamanca, 1966)
Rodriguez-Velez, Gilberto E., Jacksonville (Temple U., 1967)
Roeth, Charles L., Chicago, Ill. (U. of Illinois, 1967)
Rolbin, Harold L., Hollywood (Royal College of P&S, Scotland, 1940)
Romano, Jerome W., Buffalo, N. Y. (U. of Buffalo, 1936)
Rooks, John J. Jr., Richards-Gebaur AFB, Mo. (U. of Miami, 1968)
Rosen, Peter N., New York, N. Y. (U. of New York, 1966)
Rosenberg, Julius, Brooklyn, N. Y. (New York U., 1940)
Rosenfeld, Sidney, New York, N. Y. (New York Medical College, 1932)
Ross, George B., Miami (Glasgow U., 1952)
Rossway, Warren H., Huntington, N. Y. (U. of New York, 1953)
Roth, Stanley F., Miami (U. of New York, 1967)
Rothman, Joseph, Brooklyn, N. Y. (U. of Louvain, 1964)
Rothman, Leon M., Brooklyn, N. Y. (Chicago Medical School, 1942)
Rothstein, Ronald J., Dayton, Ohio (U. of Florida, 1966)
Rowe, Charles E. Jr., Gainesville (U. of Virginia, 1965)
Roxland, Gary, Bayside, N. Y. (Chicago Medical School, 1966)
Rua, Ignacio, Jackson, Mich. (Universidad de Antioguia, 1955)
Rubinson, Richard M., Miami (U. of Rochester, 1961)
Ruggiero, Joseph A., Orange Park (West Virginia U., 1962)
Ruggles, Dwayne L., Gainesville (U. of Missouri, 1967)
Ruhl, Forster G., Summit, N. J. (Johns Hopkins, 1948)
Ruiz, Pedro, Long Island City, N. Y. (U. of Paris, 1964)
Russell, Joseph E., Cincinnati, Ohio (St. Louis U., 1957)
Ryan, Gail M., New York, N. Y. (U. of Southern California, 1960)
Ryan, James W., Coral Gables (Cornell U., 1961)

Saffos, Rosilie O., Gainesville (U. of Florida, 1967)
Sagalowski, Ronald L., Tampa (Indiana U., 1968)
Sala, Fernando, Miami (U. of Havana, 1934)
Salazar, Carmen C., Hollywood (U. of Havana, 1943)
Salcedo, Luis M., Miami (Universidad Nacional de Colombia, 1953)
Sall, David L., Philadelphia, Pa. (Jefferson U., 1967)
Sampson, Donald E., Jacksonville (Northwestern U., 1963)
Sanchez, Andres O., Miami (U. of Havana, 1946)
Sanders, Murray, Delray Beach (U. of Chicago, 1937)
Sanet, Morton J., Miami Beach (Hahnemann Medical College, 1961)
Santos, Alberto B., Columbia, S. C. (U. of Havana, 1941)
Santrock, David A., Jacksonville (West Virginia U., 1967)
Satterlee, Winston G., Baltimore, Md. (Indiana U., 1966)
Satterwhite, James P., Gainesville (Bowman Gray School of Medicine, 1946)
Sayet, Ellen, North Miami (U. of Miami, 1967)
Schamadan, James L., Scottsdale, Ariz. (Ohio State U., 1959)
Schatz, Howard, Tampa (U. of Illinois, 1965)
Schaubel, Howard J., Pine Key (U. of Michigan, 1942)
Scheiner, Monroe I., Miami (George Washington U., 1966)
Schettini, Alfonso, Gainesville (U. of Naples, 1950)
Scheuren, John P., Prairie Village, Kan. (Kansas U., 1966)
Schieneman, Bruce O., Gainesville (Ohio State U., 1968)
Schiff, Eugene R., Coral Gables (Columbia U., 1962)
Schilder, Stephen Z., Fort Walton Beach (New York College of Medicine, 1964)
Schilowitz, Henry H., Valdosta, Ga. (Chicago Medical School, 1964)
Schoenfeld, Lawrence V., Chicago, Ill. (George Washington U., 1967)
Schor, Martin J., Bronx, N. Y. (Upstate Medical Center, New York, 1968)
Schwartz, Donald P. L., Durham, N. C. (Seton Hall College, 1963)
Schwartz, Norman S., Chicago, Ill. (U. of Illinois, 1954)
Schwartz, Robert P., Charlotte, N. C. (U. of Florida, 1968)
Scime, Samuel G., Buffalo, N. Y. (Marquette U., 1962)
Seashore, John H., Branford, Conn. (Yale U., 1965)
Seashore, Margretta A. R., New Haven, Conn. (Yale U., 1965)
Seaton, Lewis H. II, Orange Park (U. of Pittsburgh, 1955)
Secunda, Steven K., Upper Darby, Pa. (Cornell Medical School, 1966)
Segovia, Ignatius M., Narbeth, Pa. (U. of Valencia, 1951)
Seider, Howard A. Jr., Miami (U. of Michigan, 1968)
Semin, Robert N., Fall River, Mass. (Alexandria U., 1949)
Sentmanat, Rafael, Miami (U. of Havana, 1929)
Serra, Juan J., Newton, Ill. (U. of Havana, 1954)
Shagrin, Jerold W., Southfield, Mich. (Ohio State, 1964)
Shaivitz, Stephen A., Alexandria, Va. (U. of Michigan, 1965)
Sharp, Gwen R., Jacksonville (Bowman Gray School of Medicine, 1955)
Shell, William E., Ann Arbor, Mich. (U. of Michigan, 1967)
Shewmake, Bobby J., Miami (U. of Mississippi, 1966)
Silva, Alberto, Chicago, Ill. (U. of Mexico, 1956)
Silverberg, Harvey H., New York, N. Y. (McGill U., 1966)
Sisler, Glenn E., New York, N. Y. (New York U., 1961)
Sitrin, Charles T., Rochester, N. Y. (Upstate Medical Center, New York, 1967)
Smith, Donald W., Camp Zama APO (U. of New York, 1964)
Snider, Thomas H., APO New York (Cornell U., 1962)
Snyder, Charles R., Little Rock, Ark. (Indiana U., 1964)
Solovay, Mark L., Staten Island, N. Y. (U. of New York, 1967)
Soltesz, Ildiko, Miami (U. of Miami, 1968)
Sordo, Juan F., Towson, Md. (U. of Havana, 1941)
Sowell, Broadus F., Charleston, S. C. (Medical College of South Carolina, 1955)
Spano, Joseph G., Needham, Mass. (L. S. U., 1963)
Spector, Ira J., Floral Park, N. Y. (U. of New York, 1968)
Spencer, James R., Birmingham, Ala. (U. of Florida, 1965)
Spencer, William C. III, Atlanta, Ga. (Emory U., 1966)
Spens, James E., Alpena, Mich. (Wayne U., 1943)
Spindel, Lawrence D., Miami Beach (New Jersey College of Medicine, 1965)
Springer, Gerald L., Winter Park (Yale U., 1968)
Springstead, Richard W., Decatur, Ga. (Emory U., 1968)
Stegall, Brown H., Miami (U. of Virginia, 1965)
Stein, Edward H., Chicago, Ill. (Johns Hopkins, 1962)
Stein, Jay G., Chicago, Ill. (Northwestern U., 1967)
Steiner, Robert M., Homestead (Jefferson Medical College, 1964)

Stoker, Gerald L., Ann Arbor, Mich. (Indiana U., 1963)
Streiff, Irwin G., Quakertown, N. J. (U. of Louisville, 1965)
Stringer, Merle P., Jacksonville (Medical College of Georgia, 1968)
Stubbs, William K. Jr., Key Biscayne (Tulane U., 1967)
Sumrall, Arthur J., Philadelphia, Pa. (Indiana U., 1967)
Suringa, Dirk W. R., Miami (U. of Leyden, 1966)
Sweet, Errol R., Dickinson, Texas (U. of Michigan, 1967)
Syfrett, Troy F., Charlotte, N. C. (U. of Florida, 1968)

Taylor, Dean R., Baltimore, Md. (Duke U., 1962)
Tedone, Vincent M., Tampa (U. of Padua, 1963)
Telan, Ruben A., Fort Benning, Ga. (Santo Tomas U. Manila, 1961)
Thomas, Vernon E., New York, N. Y. (New York Medical College, 1952)
Thompson, Ian D., Miami (Edinburgh U., 1962)
Tidwell, Rex W., Tucker, Ga. (U. of Florida, 1963)
Timm, Oreon K., Tallahassee (Washington U., 1933)
Todd, Malyn A., Jacksonville (U. Tennessee, 1968)
Toledo, Jose, Chicago, Ill. (U. of Seville, 1947)
Tomas, Teofilo, Atlanta, Ga. (U. of Havana, 1941)
Triebwasser, Harvey S., Orange Park (U. of New York, 1966)
Tunick, Carl, Brooklyn, N. Y. (U. of Lausanne, 1962)

Ullery, John C., Columbus, Ohio (Jefferson Medical College, 1932)
Underwood, Frank O., Atlanta, Ga. (U. of Tennessee, 1964)
Unger, Abraham, Treasure Island (Anderson Medical College, 1939)
Usategui, Augusto G., Dublin, Ga. (U. of Havana, 1937)

Vaamonde, Carlos A., Coral Gables (U. of Buenos Aires, 1954)
Vaamonde, Liliana S., Coral Gables (U. of Buenos Aires, 1955)
Valdes-Castillo, Esteban J., Atlanta, Ga. (U. of Havana, 1957)
Velazquez, Jose M., Miami (U. of Havana, 1946)
Vidal, Rogelio G., Miami (U. of Havana, 1946)
Villaverde, Richard J., Miami (U. of Madrid, 1965)
Vilmanis, Rosa Z., Winter Haven (U. of Buenos Aires, 1961)
Vinas, Ramon S., Crossville, Tenn. (New York State U., Syracuse, 1952)

Wagner, Stephen I., New York, N. Y. (U. of Louvain, 1968)
Wagner, William H. Jr., Glendale, Mo. (U. of Kentucky, 1965)
Wahl, Robert R., Jacksonville (U. of Louisville, 1966)
Walbroel, Charles E., Gainesville (U. of Florida, 1968)
Wallace, Gary R., Hollywood (U. of Kentucky, 1966)
Wallace, Kenneth K., Miami (U. of Texas, 1966)
Walls, Joseph T., APO New York (U. of Arkansas, 1962)
Waltuck, Bernard L., Miami (U. of Rochester, 1967)
Wanderley, Gilberto U., Dayton, Ohio (U. of Recife, Brazil, 1955)
Warner, Larry J., Patrick AFB (U. of Maryland, 1967)
Warren, Lewis T., Evanston, Ill. (U. of Michigan, 1952)
Washington, Juan L., Metairie, La. (U. of Havana, 1953)
Weber, Charles M., Rockville, Md. (Georgetown U., 1951)
Weckesser, Barry J., Treasure Island (U. of Florida, 1967)
Wedmore, Sydney M., Jacksonville (U. of Vermont, 1968)
Weinberger, Bruce L., Lawton, Okla. (Tulane U., 1968)
Weiner, Robert G., Tampa (Yale U., 1965)
Wiese, Robert H., Scotia, N. Y. (U. of New York, 1947)
Weiss, Charles F., Gainesville (Vanderbilt U., 1949)
Wente, John A., Norfolk, Va. (U. of Louisville, 1962)
Wetter, Marvin S., Key West (Jefferson Medical College, 1966)
Whatley, Theodore R., Lantana (Medical College of Alabama, 1958)
White, Allan J., Pensacola (Brooklyn, State U. of New York, 1964)
White, John D., Rochester, N. Y. (U. of Buffalo, 1940)
Wildey, Roy A., Decatur, Ga. (U. of Cincinnati, 1956)
Wilensky, Jacob T., New Orleans, La. (Tulane U., 1968)
Williams, Charles D., Homestead (Medical College of Georgia, 1966)
Williams, Gilbert E., Cincinnati, Ohio (U. of Cincinnati, 1952)
Wills, John M., Orlando (Western Reserve, 1964)
Wilson, Cecil B., Maitland (Emory U., 1961)
Wittig, Heinz J., Gainesville (U. of Munich, 1951)
Woldoff, Herbert S., New York, N. Y. (Jefferson Medical College, 1967)
Woodrow, Steven I., New York, N. Y. (Cornell U., 1963)

Yaffa, Jack B., Opa Locka (Medical College of Virginia, 1968)
Yates, William H., Coral Gables (Baylor U., 1953)

Zackin, Henry J., New York, N. Y. (Tufts U., 1967)
Zaffke, Karl H., Raiford (Friedrich Wilhelm U., Berlin, 1936)
Zappia, Robert J., St. Ann, Mo. (George Washington U., 1964)
Zaron, Stephen J., Valdosta, Ga. (Ohio State U., 1964)
Zichlin, Jack, Tampa (Universidad Autonoma de Guadalajara, 1967)
Zimmerman, Thomas J., Jacksonville (U. of Illinois, 1968)

Florida Medical | book review

What You Can Do About Cancer by Joseph C. Maroon, M.D. Price $5.95. New York, Doubleday & Company, Inc., 1969.

"What You Can Do About Cancer" is a book for the layman rather than the physician. In readily understandable language, it provides discussions of various common types of cancer, symptoms, methods of diagnosis, treatment, and prognosis. Emphasis is upon early detection and early evaluation of symptoms by the physician. Self-examination of the breast is recommended but poorly described. Each chapter is accompanied by a sample case history of the cured patient whose disease was discovered "early" and a gory story of the dead patient who put off seeing his physician. Simplified anatomical drawings accompany most chapters. The book maintains a generally hopeful attitude of improving cancer cure rates by earlier detection and periodic health examinations and lists sources of additional cancer information for the layman.

While not for the physician's bookshelf, it might find a place in the waiting room magazine rack.

LAWRENCE H. JACOBSON, M.D.
POMPANO BEACH

books received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Company, 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. New York, Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Synopsis of Pathology by W. A. D. Anderson, M.D. and Thomas M. Scotti, M.D., Pp. 957. 7th ed. 408 illustrations. Price $10.50. St. Louis, The C. V. Mosby Company, 1968.

Shakespearean Medicine, Modernized by William H. Turnley, M.D. Pp. 274. Price $5.00. New York, Vantage Press, Inc., 1968.

Paediatric Cardiology edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

1970-1971 Drugs of Choice edited by Walter Modell, M.D. Pp. 924. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Drugs on the College Campus by Helen H. Nowlis, Ph.D. Pp. 144. Price $.95. New York, Doubleday & Company, Inc., 1969.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 by Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Cla a Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Medical Interviewing by Robert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Practical Urology by Chester C. Winter, M.D. Pp. 249. Price $11.00. 251 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Atlas of Human Electron Microscopy by Ruben P. Laguens and Cesar L.A. Gomez Dumm. Pp. 180. Illustrated. Price $20.50. St. Louis, The C. V. Mosby Company, 1969.

Plastic and Maxillofacial Trauma Symposium, Nicholas G. Georgiade, editor. Pp. 221. Price $25.00. 390 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

A Synopsis of Contemporary Psychiatry by George A. Ulett, M.D. and D. Wells Goodrich, M.D. Pp. 340. Price $9.50. St. Louis, The C. V. Mosby Company, 1969.

Genetics and Counseling in Medical Practice by Leonard E. Reisman, M.D. and Adam P. Matheny Jr., Ph.D. Pp. 215. Price $12.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Infectious Diseases and General Medicine, Vol. III. Prepared and published under the direction of Lieut. General Leonard D. Heaton. The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969.

Prematurity and the Obstetrician by Denis Cavanagh, M.D. and M. R. Talisman, M.D. Pp. 542. Price $16.50. Illustrated. New York, Appleton-Century-Crofts, Division of Meredith Publishing Company, 1969.

Symposium on the Spine by American Academy of Orthopaedic Surgeons. Pp. 289. Price $19.50. 558 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Morris Fishbein, M.D., An Autobiography, by Morris Fishbein, M.D., Pp. 505. Price $10.00. 24 Illustrations. New York, Doubleday & Company, Inc., 1969.

Personnel Administration and Labor Relations in Health Care Facilities by James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Mosby Company, 1969.

The Vitreous in Clinical Ophthalmology by Norman S. Jaffe, M.D. Pp. 310. 334 illustrations. Price $32.50. St. Louis, The C. V. Mosby Company, 1969.

Davison's Compleat Pediatrician edited by Jay M. Arena, M.D. 9th ed. Pp. 792. Price $19.50. Philadelphia, Lea & Febiger, 1969.

Arrows of Mercy by Philip Smith. Pp. 244. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Tobacco and Your Health: The Smoking Controversy by Harold S. Diehl, M.D. Pp. 271. Illustrated. Price $2.95. New York, McGraw-Hill Book Company, 1969.

Manic Depressive Illness by George Winokur, M.D., Paul J. Clayton, M.D. and Theodore Reich, M.D. Pp. 186. Price $6.50. St. Louis, The C. V. Mosby Company, 1969.

Otolaryngology edited by William F. Robbett, M.D. Vol. 2. Pp. 342. 453 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1969.

A Manual of Antimicrobial Therapy by George A. Pankey, M.D. Pp. 149. Price $5.50. Springfield, Ill., Charles C. Thomas, Publisher, 1969.

War Surgery by Camp H. M. Smith. Pp. 97. Department of Defense, Pacific Command, United States of America, 1969.

Symposium on Ocular Pharmacology and Therapeutics. Transactions of the New Orleans Academy of Ophthalmology. Pp. 311. 98 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1970.

Synopsis of Obstetrics by Charles E. McLennan, M.D. and Eugene C. Sandberg, M.D. Pp. 496. 212 illustrations. Price $9.50. St. Louis, The C. V. Mosby Company, 1970.

Medicine and Stamps edited by R. A. Kyle, M.D. and M. A. Shampo, Ph.D. Pp. 216. Illustrated. Price $1.00. Chicago, American Medical Association, 1970.

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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BALCONE

THE JOURNAL OF THE Florida Medical Association

JULY, 1970 • VOLUME 57 • NUMBER 7



A specific solution fo tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."* However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A® base.†

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.



*McClarin, W. M., and Knox, J. M.: Cutis 3:619 (June) 1967.

†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

Tinver® Lotion

Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.

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Lactinex contains a viable mixed culture of both *Lactobacillus acidophilus* and *L. bulgaricus* with the naturally occurring metabolic products produced by these organisms.

No untoward side effects have been reported to date.

Literature on indications and dosage available on request.

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References:
(1) Siver, R. H.: CMD, 21:109, September 1954. (2) Frykman, H. H.: Minn. Med., 38:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., 51:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., 15:15-16, October 1965. (5) Weekes, D. J.: NY State Jour. Med., 58:2672-2673, August 1958. (6) Ellis, S. and Spratt, J. S.: JOUR. AMER. GER. SOC., 18:410-415, May 1970.



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Effectiveness: Because its antibacterial component is DECLOMYCIN® Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes, a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose-related. Transient, reversible, nephrogenic diabetes insipidus with excessive thirst and polyuria (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: One tablet b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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Precautions: Sensitization may occur with prolonged use and is more likely to develop in eczematous otitis externa. To minimize such reactions (a) limit application to a week or less, and (b) avoid use of excessive amounts which may run down the face.

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Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

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Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In control, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic cardiovascular effects reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and erythema. Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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Painful night leg cramps...

unwelcome bedfellow for any patient– including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

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Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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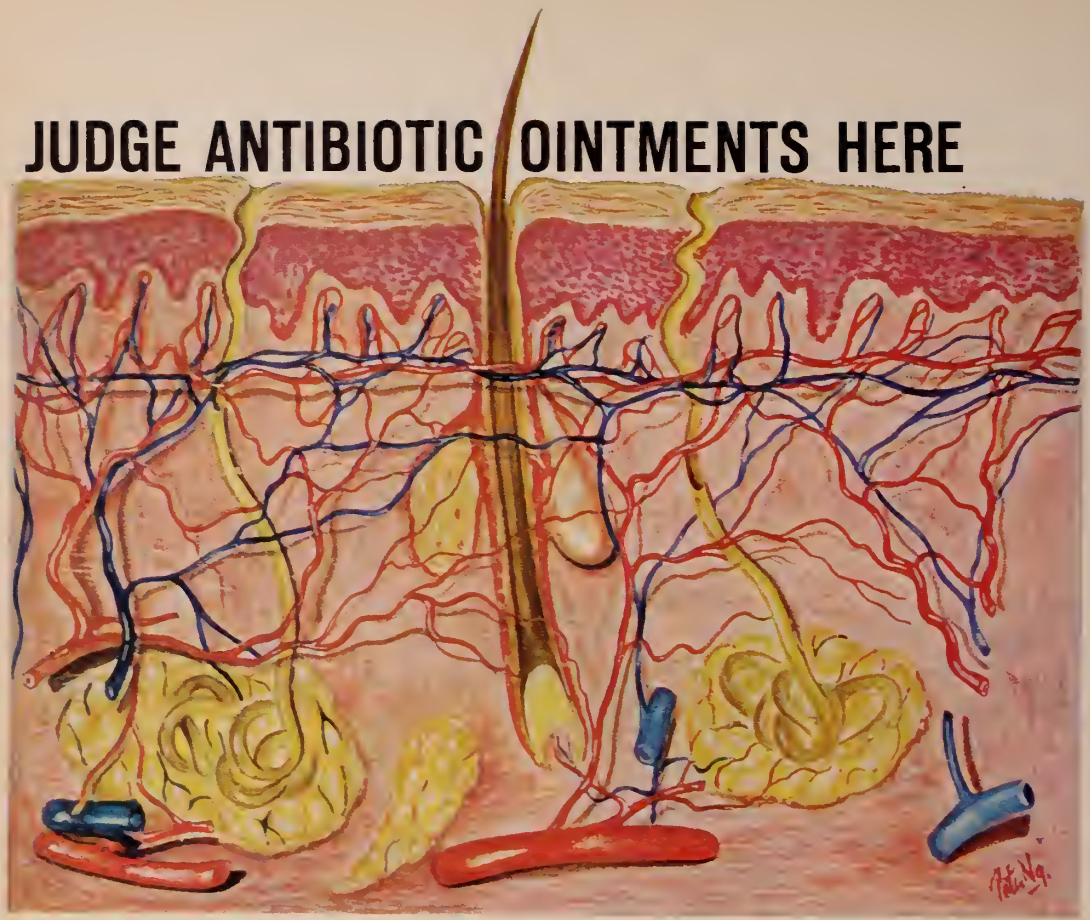
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It is summarized on this page.

Where there's no will there's a therapeutic way.

*Among persons 20% or more overweight as compared with median weight for persons of like height and sex.

1. Kannel, W.B., *et al.*: *Circulation* 35:734, 1967.
2. Thomas, H.E., Jr., *et al.*: *Med. Times* 95:1099, 1967.
3. Albrink, M.J., in: Beeson, P.B. & McDermott, W. (eds.): *Cecil-Loeb Textbook of Medicine*, ed. 12, Phila.: W.B. Saunders Co., 1967.

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President's Page



Let's Take It From Here

It's all in here—the complete transcript of the meeting of the House of Delegates. This is what your Board of Governors must implement during the coming year. There were strong and sincere differences of opinion about a good many things; obviously, everyone cannot be pleased with all the decisions of the House. We must all try our best to make them work. It will take cooperation and a great deal of effort.

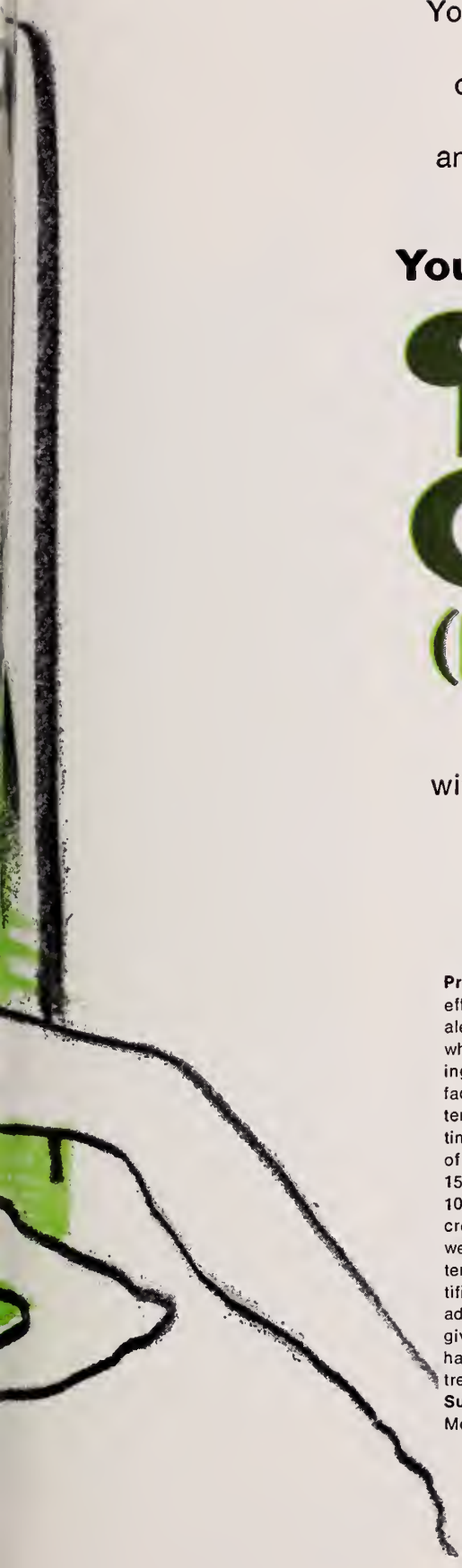
Experience certainly is a great help in working for FMA. This was my sixth year sitting up front in the House of Delegates. Henry Babers and I were surreptitiously making predictions on the outcome of the closely contested questions; in every instance our predictions were accurate. I think we both know what the House wants done. We shall certainly try to do everything you have told us to do. You who lost your fights: remember we have to abide by the will of the majority. I was, predictably, on the losing side of a few votes myself.

Younger members of the FMA have been placed in key committee assignments; three as council chairmen. This is no new precept; my antecedents as president have done the same. By the same token, the experience and knowledge of the older active members must be utilized. I think we have a balanced organization in this respect.

At the direction of the House, an ad hoc committee is being appointed to consider changes in the structure of the FMA. I am quite interested in what this committee will say. There is no doubt that we can improve our association. The only question is that of method; can we make better gains by more effective utilization of the present structure, or do we need an internal rebuilding program? The main thing is that we must all work together now, more than at any time in our history as an organization.

James T. Cobb, Jr., M.D.


"Mommy,
I don't feel
so good..."



Young heads and stomachs often can't manage the pace of hurry-up-and-stop for the light... or going up hill, down hill, and around the curve. All too quickly a pleasant drive can become an upsetting trip. *Motion sickness makes children—and their parents—absolutely miserable.*

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Bonine protects most patients—young or old—against nausea and vomiting up to 24 hours with a single dose. Pleasant-tasting Bonine tablets are chewable. They can be taken anytime, anywhere, without water. In difficult cases, multiple daily doses may be necessary for maximum response.

Precautions: Although the incidence of drowsiness and atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. *Use in women of childbearing age:* In weighing potential benefits vs. risk in women of childbearing age, consider the fact that a review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum.

Supply: 25 mg. scored tablets.

More detailed professional information available on request.

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Summer time...monilia time!

No wonder you see so many more cases of vaginal moniliasis during this season. A damp, warm bathing suit provides a perfect breeding ground for fungal invaders. But your patients need not suffer the pain, the embarrassment and the discomfort of these stubborn infections. Nor the disappointment which comes when they find "the cure didn't take."

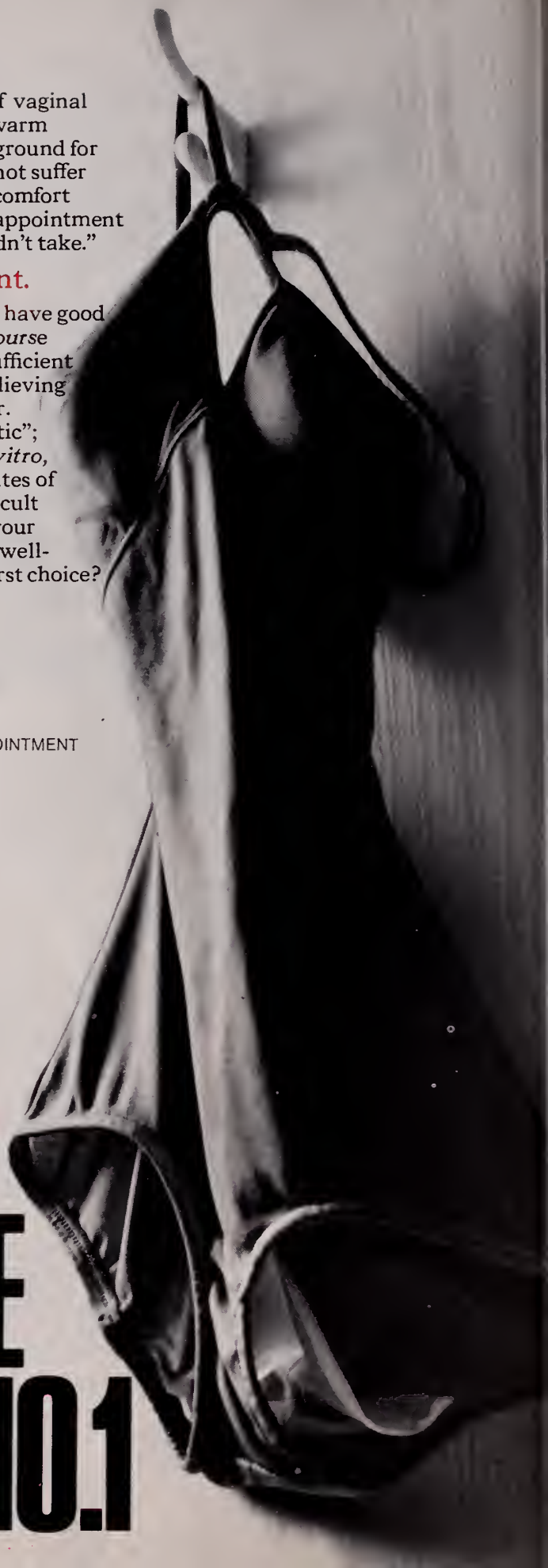
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Candeptin® CANDICIDIN

Formula:
CANDEPTIN Vaginal Ointment contains a dispersion of candicidin powder equivalent to 0.6 mg. per gm. or 0.06% candicidin activity in U.S.P. petrolatum. 3 mg. of candicidin is contained in 5 gm. of ointment or one applicatorful. CANDEPTIN Vaginal Tablets contain candicidin powder equivalent to 3 mg. (0.3%) candicidin activity dispersed in starch, lactose and magnesium stearate.

Indications:
Vaginal moniliasis due to Candida albicans and other Candida species.

Contraindications:
Patient sensitivity to any of the components. During pregnancy manual tablet insertion may be preferred since the use of the ointment applicator or tablet inserter may be contraindicated.

Caution:
Clinical reports of sensitization or temporary irritation with CANDEPTIN Vaginal Ointment or Vaginal Tablets have been extremely rare. To avoid re-infection, it is recommended that the patient refrain from sexual intercourse during treatment or the husband wear a condom.

Dosage:
One vaginal applicatorful of CANDEPTIN Ointment or one Vaginal Tablet is inserted high in the vagina, twice a day, in the morning and at bedtime, for 14 days. Treatment may be repeated if symptoms persist or reappear.

Dosage forms:
CANDEPTIN Vaginal Ointment is supplied in 75 gm. tubes with applicator (14-day regimen requires 2 tubes). CANDEPTIN Vaginal Tablets are packaged in boxes of 28, in foil, with inserter—enough for a full course of treatment. Store under refrigeration.

Federal law prohibits dispensing without prescription. CANDEPTIN is a registered trade-mark of Julius Schmid, Inc.

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Garamycin®
brand of
gentamicin sulfate
injection

*An estimated 208,000 patients have received GARAMYCIN Injectable to date. The population of St. Petersburg is 205,000. (Estimated 1969 figures from The New York Times Encyclopedic Almanac 1970.)

See Clinical Considerations section on last page...

Mounting acceptance in the hospital...

Proven clinical effectiveness



Respiratory Infections

Outstanding results in serious gram-negative respiratory infections[1,2]

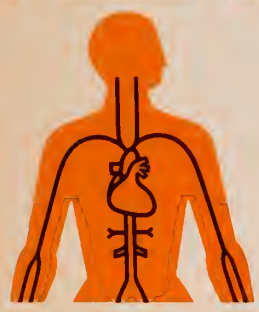
GARAMYCIN Injectable may prove successful where other antibiotics have failed.



Urinary Tract Infections

Strikingly effective in selected urinary tract infections[3]

With relatively low intramuscular doses, the promptly attained levels of GARAMYCIN achieved in the urine are considerably higher than the concentrations required for effectiveness against virtually all susceptible gram-negative pathogens. (Appropriate precautions are indicated in patients with impaired renal function; consult Package Insert for full details.)



Septicemia

May be lifesaving[4-6]

Numerous investigators have drawn attention to the value of GARAMYCIN Injectable in the treatment of gram-negative septicemias, often complicated by shock. Many hospital strains of *Serratia* are susceptible.[6]



Wounds and Burns

Response may be dramatic in wounds and burns complicated by sepsis[7]

The established efficacy of GARAMYCIN Injectable against *Pseudomonas*—as well as most other gram-negative pathogens—makes it an especially useful agent in the treatment of infected wounds and burns.

Important Precautionary Note Patients receiving treatment with GARAMYCIN Injectable (gentamicin sulfate injection) should be under close clinical observation because of the toxicity associated with the use of the drug. Ototoxicity, vestibular and auditory, can occur in patients, primarily those with preexisting renal damage, treated with GARAMYCIN Injectable for longer periods or with higher doses than recommended.

GARAMYCIN Injectable is potentially nephrotoxic, and this should be kept in mind when it is used in patients with preexisting renal damage.

This drug should be limited to the treatment of serious infections caused by susceptible gram-negative bacteria, with due regard for relative antibiotic toxicity. (See Clinical Considerations section.)

Mounting evidence in the laboratory...

Schering

Over 95% gram-negative pathogens sensitive.*

lo other antibiotic performed comparably *in vitro* against gram-negative pathogens.
ı a nationwide culture audit of antibiotic sensitivity patterns, sensitivity reports from 106 hospitals, eographically representative by census tract and of varying sizes, were analyzed. During the three-ıonth period, ***every*** gram-negative culture slip from ***every*** hospital was surveyed. The total number of ultures involved in the audit was 97,091. The total number of sensitivity determinations was 643,503.

Pathogens	Percentage of sensitive strains Number of strains tested Garamycin	Kanamycin	Cephalothin	Cephaloridine	Ampicillin	Colistimethate	Chloramphenicol	Tetracycline
	Antibiotics*							
Klebsiella pneumoniae	99.5% 962	84.7% 992	86.2% 995	76.1% 67	32.7% 1,020	96.3% 640	82.9% 1,028	77.1% 1,026
Aerobacter aerogenes	95.9% 2,739	86.1% 2,818	53.5% 2,985	58.8% 1,514	22.7% 3,066	88.6% 2,603	85.8% 3,071	67.8% 2,981
Klebsiella aerobacter group	98.8% 566	83.9% 547	66.1% 522	60.5% 276	28.0% 553	89.5% 560	86.2% 587	62.8% 433
Klebsiella, all others	92.7% 2,944	83.3% 3,186	77.4% 2,976	67.5% 627	13.5% 2,883	95.0% 2,105	81.6% 3,212	70.6% 3,063
Pseudomonas aeruginosa	91.6% 4,528	29.8% 4,460	6.6% 4,418	6.6% 1,279	6.0% 4,360	91.3% 3,852	26.9% 4,608	26.4% 4,404
Proteus, indole-positive	91.8% 1,031	85.8% 1,062	39.9% 981	54.1% 364	40.2% 1,042	10.3% 758	76.1% 1,096	42.1% 1,051
Proteus mirabilis, indole-negative	94.9% 3,272	90.1% 3,378	83.1% 3,290	77.5% 975	78.0% 3,274	8.8% 2,634	85.9% 3,469	26.8% 3,278
Proteus, unspecified	96.2% 1,335	85.8% 1,371	71.7% 1,434	70.0% 647	64.7% 1,435	11.2% 1,233	76.0% 1,421	22.4% 1,298
Escherichia coli and all other *Escherichias*	96.4% 12,557	91.4% 12,818	87.8% 12,686	88.8% 4,251	74.6% 12,899	95.4% 10,623	94.1% 13,086	70.0% 12,559
Paracolobactrum, all	93.4% 303	88.9% 325	62.0% 305	74.2% 62	43.8% 340	80.9% 215	87.1% 350	72.6% 340
Coliform bacteria	99.0% 593	91.2% 649	81.5% 637	66.7% 21	52.7% 624	95.6% 607	91.6% 678	76.1% 637
Totals	95.1% 30,830	80.5% 31,606	65.3% 31,229	68.1% 10,083	50.3% 31,496	75.8% 25,829	79.7% 32,606	56.5% 31,070
Gram-positive (included for consistency with Package Insert, not an approved indication)								
Staph—*S. aureus, coagulase-positive*	97.4% 1,548	88.8% 1,458	97.7% 2,050	98.7% 636	61.1% 1,559	20.4% 628	94.4% 2,123	83.7% 1,966
Staph—*S. aureus,* unspecified	99.3% 993	92.8% 902	98.1% 1,289	95.3% 213	45.8% 1,153	29.3% 116	96.4% 1,427	82.3% 1,360

*Adapted from a three-month, nationwide hospital audit by R. A. Gosselin and Co., Inc., Dedham, Massachusetts (mid-May to mid-August,1969).[5]
Antibiotics with significant gram-negative spectra are included. Organisms are listed as reported by laboratory.
Sensitivity testing was done by the disc method, a generally reliable test in the hospital setting. It should be noted, however, that the results with GARAMYCIN were somewhat higher than the results reported where the tube dilution technique was used. (See Clinical Considerations section which follows.) The concentration of the GARAMYCIN disc was 10 mcg.
Whereas standard testing methods were used by all hospitals, it is acknowledged that in a survey of this kind considerations such as differences in methodology are possible sources of error. The comparative percentage-sensitivity results derived from a survey of this kind are, therefore, not absolute. One should keep in mind also that the proper selection of an antibiotic is based not only on susceptibility testing but on relative toxicity and other clinical considerations as well.
It is felt, nonetheless, that the broad scope of the survey and the extreme care in data collection and tabulation permit a conclusion that the results are *generally* representative of current nationwide antibiotic sensitivity patterns.

Injectable Garamycin®
brand of gentamicin sulfate injection

See Clinical Considerations section on last page...

Injectable Garamycin®

brand of gentamicin sulfate injection

ADULT DOSAGE GUIDELINES

See definitive prescribing information in Package Insert.

Patients with Normal Renal Function

Total Daily Dose (administered in two, three, or four divided doses)			
	Less Severe	**Resistant/ Moderately Severe**	**Serious/Life-Threatening**
Urinary Tract Infections (due to susceptible strains of gram-negative bacteria)†	0.8-1.2 mg./kg. for 7-10 days	Larger doses or additional antibacterial therapy should be considered in severe urinary tract infections or in resistant cases involving the renal parenchyma or anatomic anomaly.	up to 5 mg./kg.
Other Infections including bacteremia, infected surgical wounds, severe soft tissue infections, and respiratory tract infections (due to susceptible strains of gram-negative bacteria)	3 mg./kg. for 7-10 days		

†Alkalinization of the urine may be a useful therapeutic adjunct.

Patients with Impaired Renal Function

To minimize the risk of ototoxicity in patients with impaired kidney function, only the first dose should be that normally recommended. Each subsequent dose should be half or less of that recommended for patients with normal renal function, depending upon the degree of renal impairment.

In patients with renal failure who are undergoing 14-hour hemodialysis twice weekly, administration of 1 mg./kg. GARAMYCIN Injectable at the end of each dialysis period has been suggested.

Clinical Considerations

Indications: GARAMYCIN Injectable is clinically effective in infections due to susceptible strains of gram-negative bacteria, including *Pseudomonas aeruginosa,* and species of indole-positive and indole-negative *Proteus, Escherichia coli,* and *Klebsiella-Aerobacter.* Bacteriologic studies should be conducted to identify the causative organism and to determine its sensitivity to gentamicin sulfate. Sensitivity discs of the drug are available for this purpose. If the susceptibility tests indicate that the causative organism is resistant to gentamicin sulfate, other appropriate antibiotic therapy should be instituted.

IN VITRO INHIBITION OF CLINICALLY IMPORTANT BACTERIA BY GENTAMICIN SULFATE (TUBE DILUTION STUDIES)

BACTERIA	No. of Strains Tested	No. of Strains (%) Inhibited by: 4 mcg./cc. or less		8 mcg./cc. or less*		No. of *In Vitro* Studies
Staphylococcus aureus	1,210	1,200	(99%)	1,206	(99%)	11
Pseudomonas aeruginosa	885	771	(87%)	828	(93%)	16
Escherichia coli	836	736	(88%)	779	(93%)	11
Indole-positive and indole-negative *Proteus* species	477	210	(44%)	358	(75%)	12
Klebsiella-Aerobacter species	292	205	(70%)	231	(79%)	10

*Number of strains (%) of gram-negative bacteria inhibited by 10 mcg./cc. or less are as follows: *Pseudomonas aeruginosa,* 828 (93%); *Escherichia coli,* 792 (95%); *Proteus* species, 393 (82%); *Klebsiella-Aerobacter* species, 284 (97%). From same studies as above.
Source: Package Insert

This drug should be limited to the treatment of serious infections caused by gram-negative bacteria, particularly *Pseudomonas aeruginosa, Proteus* and other susceptible organisms, with due regard for relative antibiotic toxicity. Therefore, the drug should be considered for use against gram-negative: 1. Bacteremia; 2. Infected surgical wounds; 3. Severe soft tissue infections, including burns complicated by sepsis; 4. Respiratory tract infections; and 5. Selected cases of urinary tract infection.

Contraindications: GARAMYCIN Injectable is contraindicated in individuals with a history of hypersensitivity or toxic reactions to gentamicin.

Warnings: Patients receiving treatment with GARAMYCIN should be under close clinical observation because of the toxicity associated with the use of this drug. Ototoxicity, vestibular and auditory, can occur in patients, primarily those pre-existing renal damage, treated with GARAMYCIN Inject usually for longer periods or with higher doses than recommen

GARAMYCIN Injectable is potentially nephrotoxic, and should be kept in mind when it is used in patients with pre-exis renal impairment. Kidney function diminished by infection of upper urinary tract may, however, improve during effective t ment with GARAMYCIN Injectable.

Concurrent administration of potentially ototoxic drugs suc streptomycin and kanamycin or of potentially nephrotoxic d such as polymyxin, colistin, and kanamycin with gentamicin su has not been shown to afford any clinical advantages and, more may result in additive toxicity. Monitoring of vestibular, coch and renal function will provide guidance for therapy in such c

Precautions: In patients with impaired renal function in wh serious infection develops, serum concentrations of the drug rise, with consequently increased risk of ototoxicity. In these tients or in those in whom recommended dosage or duratio therapy must be exceeded as a life-saving measure, routine stu of kidney function should be performed when possible. These be supplemented by evaluation of the vestibular and auditory f tion and measurement of serum concentration of the drug w feasible. Serum concentrations of gentamicin should be maintai below the range of 10-12 mcg./ml. to reduce risk of ototoxicity

Ordinarily, treatment should not be given for more than 7 t days or be repeated unless required for serious infection not sponsive to other agents.

As with other antibiotics, treatment with GARAMYCIN Inject may occasionally result in overgrowth of nonsensitive organism superinfection occurs, appropriate therapy is indicated.

Safety for use in pregnancy or the potential for fetal ototoxicit nephrotoxicity have not been established. Studies in pregnant mals have not revealed teratogenic or ototoxic effects in the fe GARAMYCIN Injectable should not be used in pregnant patient in women of childbearing age unless its use is deemed advis by the physician.

Adverse Reactions: The overall incidence of ototoxicity consid related to treatment with GARAMYCIN Injectable was 2.8 per (16 of 565 patients). Contributory factors (two or more factors w relevant to most patients) were as follows: 10 had azotemia, received a total of 1 gram or more of the drug, 7 had recently ceived other potentially ototoxic antibiotics (streptomycin or ka mycin), and 5 were over 60 years of age. Six also had decrea high-tone hearing acuity, which returned to or toward norma the 4 patients retested.

Analysis of BUN data indicated that 4 (2%) of 172 patients sho increases in BUN that were probably related to treatment w GARAMYCIN Injectable. Of 20 increases probably or possibly rela to treatment, 7 were reversible, 9 occurred in terminal patients, 4 had no follow-up.

Other adverse reactions associated with treatment were one insta each of urticaria, decreased hematocrit, and reversible depres of granulocytes with normal bone marrow. Other rarely repo and possibly treatment-related adverse reactions were anemia, creased reticulocyte count, rash, purpura, drug fever, hypoten convulsions, twitching, salivation, nausea, vomiting, increased tr aminase activity (SGOT or SGPT), increased serum bilirubin, creased serum calcium, and joint pain.

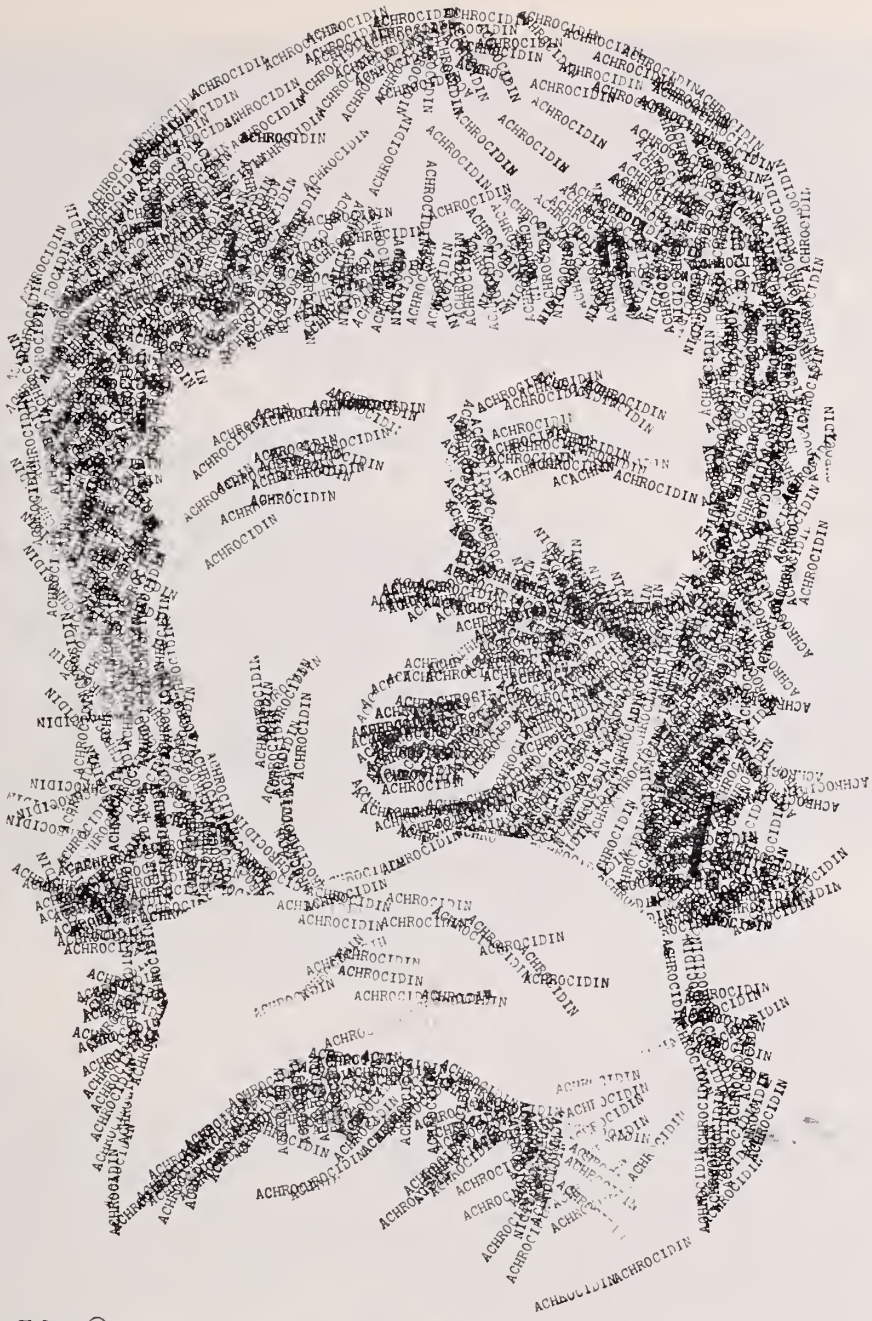
Packaging: GARAMYCIN Injectable, 40 mg./cc., 2-cc. multiple- vials, for intramuscular administration.

References: (1) Brayton, R. G., and Louria, D. B.: Gentamicin gram-negative urinary and pulmonary infections, Arch. Int. M *114*:205, 1964.* (2) Louria, D. B.; Young, L.; Armstrong, D., Smith, J. K.: Gentamicin in the treatment of pulmonary infecti J. Infect. Dis. *119*:483, 1969. (3) Cox, C. E.: Gentamicin, a aminoglycoside antibiotic: Clinical and laboratory studies in urin tract infections, J. Infect. Dis. *119*:486, 1969. (4) Groll, E.: Clin experience with gentamicin, data from 12 German clinics, in G tamicin: First International Symposium, Paris, January 1 Lucerne, Essex Chemie AG, pp. 121-128.* (5) Jackson, G. G.: Labo tory and clinical investigation of gentamicin, *ibid.*, pp. 62-74. Medeiros, A. E.: Discussion, J. Infect. Dis. *119*:533, 1969. (7) Polk, Discussion, J. Infect. Dis. *119*:529, 1969. (8) Three-month, nationw hospital audit by R. A. Gosselin and Co., Inc., Dedham, Massachus (mid-May to mid-August, 1969).

*Dosage in this investigational study was less than now recommen in Package Insert.

For more complete prescribing details, consult package insert Physicians' Desk Reference. Schering literature is also availa from your Schering Representative or Medical Services Departm Schering Corporation, Union, New Jersey 07083.

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tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

HROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatment etracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of the er respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elderly ents you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN Tetracycline equivalent to acycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

raindications: Hypersensitivity to any ponent.

ning: In renal impairment, since liver toxis possible, lower doses are indicated; durprolonged therapy consider serum level rminations. Photodynamic reaction to sun may occur in hypersensitive persons. osensitive individuals should avoid expo discontinue treatment if skin discomfort rs.

autions: Drowsiness, anorexia, slight gasdistress can occur. In excessive drowsiconsider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat betahemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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PROCEEDINGS

Ninety-Sixth Annual Meeting
Florida Medical Association, Inc.
Hollywood, May 6-10, 1970

President's Address

Henry J. Babers Jr., M.D.

Fellow physicians and guests of the Florida Medical Association, my heart is full of a lot of things but I won't say them even though they are all good as far as I am concerned. This will be in the nature of a brief report to you and if you take a ten minute nap now, you will not have missed much. A speech at this juncture in our meeting is the least thing we need.

First, I would like to refer to my President's Page letter to you in our monthly Journal of the Florida Medical Association in which I have presented most of my ideas to you, so there is no need in repeating them. Secondly, my report as Chairman of the Board of Governors to this meeting will be taken up in Reference Committee number 3. This report is printed in the Delegate's Handbook and I think will interest you. It is factual and complete (although brief) and summarizes most of our activities during a long year. Last year at this meeting there was discussion concerning the financial statement and financial situation of the Florida Medical Association. In Reference Committee number 3, Dr. Floyd Hurt, Secretary-Treasurer of the Florida Medical Association, and Mr. Harold Parham, Executive Vice President of this Association, will be available to go over financial questions for the reference committee and for you. The budget for the coming year will be presented and discussed and the CPA audit for the past year will be presented and available.

A few general remarks and I am through. Speeches are either too emotional or too boring for me and I shy away from them, but it is fun to talk to you, my friends and medical comrades, informally. Frankly, I did not take this job as FMA President as a front man or for personal attainment. To the best of my ability I have avoided personal publicity. I would rather work hard in the background and let others, better qualified by their special assignments in the Florida Medical Association, make any public statements necessary. I heard someone say the other



Dr. Henry J. Babers delivers his President's Address to the House of Delegates.

day, "It is nice to feel important." Maybe so, but when any one of us gets to liking the feeling, I recall the old saying that "All glory ends in bitterness. He who renounces fame has no sorrow." We are born to die and anyone who is my age realizes that he has lived longer than he *will* live. Anyone who gets to feeling important in his own right simply does not understand. The challenge of FMA to any of us is getting involved in something bigger than ourselves rather than for our own selfish interest.

My aspirations this year have been to strengthen the FMA by making us as effective as possible through our entire structure. This includes our Executive Committee, the Board of Governors, our Councils and Committees—all working closely with the county medical societies. We have not batted a thousand, but we are doing pretty well and you can be proud of this fact.

I hope that during this year you all have had an opportunity to keep abreast of events by attending our various conferences and seminars and meetings or reading the reports of these in our JOURNAL, in our Briefs, our committee reports, our legislative bulletins and through the county and specialty society channels. Also I hope that at this meeting you will learn more about the FMA and its problems and affairs.

In our reference committees there will be discussion about many things, some of them controversial. In our general and scientific sessions, we cover a lot of fields of current interest. The actions of the reference committees and the House of Delegates will be published in the July issue of the JOURNAL of the Florida Medical Association and this oftentimes makes very interesting reading. Look in the program and in the Delegate's Handbook for the subjects to be discussed in which you have an interest. You will be welcome at the reference committee meetings.

Some of my special interests this year have been:

1. To attract and keep competent people as our council and committee chairmen and members and to be sure that they got all the cooperation and help possible. We have done this and our programs are succeeding. One thing we have going for us in our membership is intelligence and brain power. These are assets you cannot buy. If we give our committees a task, they do the job. Our FMA structure has been led by people who have kept cool heads and who have kept a good balance of morality and humility without arrogance. I am proud of every man in the FMA that I have dealt with.

2. To reorganize our Executive Office so that it can function better. This has been done, especially with the help of our dues increase.

3. To reorganize our state legislative effort. This has been done and I cannot praise too highly everyone working on this level. Our performance record in reference to legislative affairs has always been clean. We have never been involved with any undercover deals and we don't plan on anything of that sort in the future.

4. To develop better reaction time to attacks upon the medical profession and to encourage the American Medical Association to do the same. Medical policy is sometimes difficult, the facts sometimes elusive and oftentimes we lose by reacting too late or too emotionally or incorrectly. One of the criticisms of organized medicine is that it only reacts, not acts. Be that as it may, our governmental agencies must be made aware of the fact that even if we *don't* present a strong action program, we have a hell of a counterpunch.

5. To develop better relationships with the Florida Hospital Association. This has been done and I am sure this communication channel will be beneficial.

6. We have resolved to improve our communications; (a) through our Briefs, (b) through our field men, (c) through our FMA-local county society liaisons and (d) through the JOURNAL. Our JOURNAL has been superb this year and our Editor deserves a great deal of credit.

7. To develop better ways of working with and influencing our medical schools so that we can have some measure of influence on them and, in turn, help them with their considerable problems. We have, therefore, a special section on medical education planned for this meeting on Friday afternoon.

8. To develop better liaison communication with government agencies—local, state and national. Again we have developed a program on governmental problems to be held Saturday afternoon.

This finishes my report. I want to thank you all from the bottom of my heart for the wonderful help and cooperation you have given me this year. Everyone has been wonderful to me and I am so grateful. The Florida Medical Association Auxiliary has been a big help this year.

To my comrades in the Alachua County Medical Society and in the Alachua General Hospital my sincere and humble thanks for everything. My comrades in practice have taken on extra bur-

dens to lighten mine this year. Many, many thanks. Lastly, I must publicly confess to my wife and family that I have been hard to live with this year and appreciate how wonderful they have been to me and I will try to make amends now that I am off the hook.

I hope that in the years to come, I can be shown to be like our other past presidents,—men of real character, high in faith, integrity and responsibility—and that I, too, will prove, as they have, that your judgment was good when you elected me your president.

General Session

Abel Seymour Baldwin Memorial Lecture

The General Session of the Ninety-Sixth Annual Meeting of the Florida Medical Association was called to order at 11:00 a.m. on Friday, May 8, 1970, in the Regency Room of the Diplomat Hotel, Hollywood-by-the-Sea, Florida, by President Henry J. Babers Jr.

Dr. Babers announced the winners of the awards for the best scientific exhibits. First place award winner was "Organization and Experience of an Organ Transplant Unit—Initial Clinical Experience with Kidney and Heart," Jerome Benson, M.D., Miami Beach. Second award winner was "Percutaneous Access to Implanted Electrodes—A System Allowing Easy Assessment of Implanted Pacemakers and Cardiac Potentials and Thresholds," David A. Nathan, M.D., John W. Lister, M.D., J. Walter Keller, M.D., Rafael Castillo, M.D., and Arthur Gosselin, M.D., Miami Beach. Third award winner was "Laryngo-Tracheal Trauma," Frederic W. Pullen II, M.D., and L. Alan Smith, B.S., Miami Shores. Acknowledgement and thanks were extended to J. Brown Farrior, M.D., Tampa, for bringing his exhibit "Myringoplasty, Tympanoplasty and Mastoidectomy," the 1969 American Medical Association Billings Gold Medal winner.

Dr. Babers then introduced Alfred M. Freedman, M.D., Professor and Chairman, Department of Psychiatry, New York Medical College, New York. Dr. Freedman's presentation was entitled "Adolescence and Drug Problems," and concentrated particularly on the use of marijuana by adolescents. He discussed studies in which the backgrounds and family situations of marijuana users were compared, and the total social complexities as factors in the use of drugs. The general session adjourned at 12:10 p.m.



Attending the Board of Past President's breakfast were (standing from left) Drs. W. Dean Steward, Leo M. Wachtel, Jere W. Annis, Robert E. Zellner, Samuel M. Day, Ralph W. Jack, George S. Palmer, H. Phillip Hampton, Jack Q. Cleveland, (seated from left) Warren W. Quillian, John D. Milton, William C. Roberts, William C. Thomas Sr., Walter C. Jones and Joseph S. Stewart.

First House of Delegates

The House of Delegates of the Florida Medical Association convened at 4:10 p.m. on Wednesday, May 6, 1970, in the Regency Room of the Diplomat Hotel, Hollywood-by-the-Sea, Florida, with Dr. Charles K. Donegan, Speaker of the House, presiding.

The invocation was pronounced by Dr. Warren W. Quillian, Past President, of Coral Gables.

"Our Father, we thank Thee for this occasion; for the opportunity to obtain instruction and for the pleasure of good fellowship together. We need divine guidance in our deliberations. Impart to us wisdom and proper judgment as we consider the problems that face us. May our actions be followed with benefit for our patients and for the advancement of Thy Kingdom. Amen."

The Speaker announced the membership of the Credentials Committee: Drs. William W. Thompson, Chairman, Joseph C. Von Thron and Edward G. Haskell Jr.

The chairman of the Credentials Committee, Dr. Thompson, reported a quorum of 228 delegates present out of a possible 305, representing a majority of the delegates and a majority of the component county medical societies, and moved that the delegates be seated.

Delegates

ALACHUA—John W. Andrews, Billy Brashear, Edward G. Byrne, George T. Singleton, I. Irving Weintraub (Absent—J. Russell Green Jr., William C. Ruffin Jr.).
BAY—(Absent—John F. Mason Jr., James A. Poyner).
BREVARD—Jack Bechtel, Donald Bryan, N. Frank Fain Jr., Michael Foley, John Kaminski, Robert Seelman, Joseph Von Thron.
BROWARD—Robert L. Andreae, Miles J. Bielek, Robert J. Brennan, Gordon B. Carver, Frederick W. Fisher, Paul E. Gutman, John R. Mahoney, John H. Mickley, Ray E. Murphy Jr., Daniel C. Smith, W. Dotson Wells, John I. Williams (Absent—Richard S. Doyle, David C. Lane, J. G. McAllister, Robert U. Moersch, Henry D. Perry Jr., Robert H. Pfeifer, Lees M. Schadel, Diran M. Seropian).
CHARLOTTE—(Absent—Carl N. Reilly).
CLAY—William A. Mulford.
COLLIER—Courtlandt D. Berry, Fred A. Butler.
COLUMBIA—Frank E. Adel.
DADE—William G. Aten Jr., Jerome Benson, Morris Blau, Rufus K. Broadaway, Richard C. Clay, Francis Cooke, Vincent P. Corso, John E. Cunio, Dewitt C. Daughtry, Joseph Davis, Richard C. Dever, Miguel Figueroa, Joseph Fitzgerald, Milton Goldman, Leo Grossman, Marshall Hall, Henry Hardin, James W. Holmes, James J. Hutson, Walter Jones III, Eugene Konrad, H. A. P. Leininger, Ronald Mann, Donald Marion, Ildefonso R. Mas, Charles A. Monnin Jr., Sheldon D. Munach, M. Murray Schechter, Everett Shocket, Gilbert B. Snyder, Donald Stannus, Chauncey Stone Jr., Mario Stone, William Straight, Charles F. Tate, Maynard Taylor, Arthur Wood Jr., Scheffel Wright, Nelson Zivitz (Absent—William Abelove, Julius Alexander, David J. Becker, Manuel L. Carbonell, Chester Cassell, Edward Cullipher, O. William Davenport, H. Clinton Davis, Victor D. Dembrow, Robert F. Dickey, Donald Dooley, L. W. Dowlen, M. Eugene Flipse, Maurice Greenfield, Jim C. Hirschman, Caroline B. Hunter, Paul Jarrett, Albert C. Jaslow, James R. Jude, Robert Katims, David Kirsh, Seymour London, James C. Pringle Jr., Walter Sackett Jr., Edward St. Mary, Lee Stapp).
DESOTO-HARDEE-GLADES—Calvin Martin.
DUVAL—James L. Borland Jr., Robert J. Brown, Clyde M. Collins, James H. Corwin II, Thomas S. Edwards, Joseph Farrington, John J. Fisher, Stephen P. Gyland Jr., Donald R. Hagel, Karl B. Hanson, L. E. Masters, Thad Moseley, John A. Rush Jr., Guy T. Selander, William A. Van Nortwick, James W. Walker (Absent—Harry W. Reinstine Jr., C. Burling Roesch).
ESCAMBIA—W. A. Covell, Charles J. Kahn, Julian O. Olsen Jr., Philip B. Phillips, Lockland V. Tyler, Earl G. Wolf.
FRANKLIN-GULF—Joe Hendrix.
HIGHLANDS—Donald C. Hartwell.
HILLSBOROUGH—Richard H. Blank, Ernest R. Bourkard, Francis C. Coleman, Richard G. Connar, John C. Fletcher, James M. Ingram, Victor H. Knight, Eugene B. Maxwell, W. Mahon Myers, Charles L. Pope, William W. Trice, Harold L. Williamson, James A. Winslow, Henry L. Wright (Absent — Richard S. Hodes).
INDIAN RIVER—(Absent—Hampton L. Schofield, David Tingle).
LAKE—Bergon F. Brokaw, J. Basil Hall.
LEE-HENDRY—James L. Bradley, Larry P. Garrett, H. Quillian Jones Sr., Edward W. Salko.
LEON-WAKULLA-JEFFERSON—E. G. Haskell, N. H. Kraeft, George N. Lewis, Robert N. Webster.
MADISON—(Absent—A. F. Harrison).
MANATEE—Irving Hall, Joseph Newhall (Absent—Roger Meyer).
MARION—Henry Harrell (Absent—Alex Goulard).
MONROE—Jaime M. Benavides.
NASSAU—Cecil B. Brewton.
OKALOOSA—W. W. Thompson (Absent—Malcolm C. Crotzer).
ORANGE—Axel W. Anderson, Norman F. Coulter, Robert W. Curry, Truett H. Frazier, Howard B. Goodrich, Paul C. Harding, Robert T. Hoover, Harold W. Johnston, Louis C. Murray, George A. Neder, Edward W. Stoner, Thomas B. Thames, Miles W. Thomley (Absent—Louis P. Brady, Franklin G. Norris).
PALM BEACH—Carl E. Andrews, Vernon B. Astler, James R. Brandon, Jerry F. Cox, Maximilian A. Crispin, John J. Farrell, James R. Forlaw, Bernard Kimmel, Richard B. Moore Jr., H. John Richmond, L. Myrl Spivey, Governor M. Witt, Harold A. Yount.
PANHANDLE—William F. Brunner, James B. O'Connor.
PASCO-HERNANDO-CITRUS — James W. Basinger, Samuel R. Miller Jr.
PINELLAS—Joseph A. Ezzo, Allyn B. Giffin, Douglas W. Hood, David S. Hubbell, Charles A. Johnson John T. Karaphillis, Charles H. Lasley, Jack A. MaCris, Donald G. Nikolaus, David T. Overbey, Thomas M. Quehl, James M. Stem, George H. Welch Jr., Abbott Y. Wilcox Jr., Walter H. Winchester, Rowland E. Wood (Absent—Richard C. Trump).
POLK—James R. Boulware III, J. Gerard Converse, Howard M. DuBose, Spencer R. Garrett, John W. Glotfelty, Willard E. Manry Jr., John H. Miller, John C. Moore Jr., Angelo P. Spoto Jr.
PUTNAM—(Absent—Roy E. Campbell).

ST. JOHNS—William W. O'Connell.
ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.
SANTA ROSA—(Absent—John P. Merchant).
SARASOTA—Irving A. Beychok, John M. Butcher, Samuel E. Kaplan, Franklin H. Pfeiffenberger, Karl R. Rolls, Millard B. White.
SEMINOLE—Fred Ionata, Luis Perez.
SUWANNEE-HAMILTON-LAFAYETTE—Hugo F. Sotolongo.
TAYLOR—Bart Knight.
VOLUSIA—Bob Bullwinkel, Thomas D. Cook, James Demming, William H. Harrison Jr., Richard W. Snodgrass (Absent—Robert L. Stevenson).
WALTON—(Absent—Howard F. Currie).
COUNCIL ON SPECIALTY MEDICINE—Frederick C. Andrews, James D. Beeson, West Bitzer, Jack H. Bowen, Andre S. Capi, James W. Clower Jr., Samuel G. Hibbs, Joseph G. Matthews, William T. Mixson, Sanford A. Mullen, Edward J. Sullivan Jr. (Absent—Emmet F. Ferguson Jr., David W. Goddard, John M. Hamilton, Robert E. Raborn, Richard G. Skinner Jr.).
DELEGATES TO AMA—Jere W. Annis, Francis T. Holland, Robert E. Zellner (Absent—Burns A. Dobbins Jr.).
PAST PRESIDENT AMA—(Absent—Edward R. Annis).
OFFICERS AND BOARD OF GOVERNORS—Henry J. Babers Jr., Jack Q. Cleveland, James T. Cook, James F. Cooney, William J. Dean, Charles K. Donegan, Franklin J. Evans, Richard M. Fleming, Floyd K. Hurt, Eugene G. Peek Jr., W. Dean Steward, William M. C. Wilhoit (Absent—Russell B. Carson Jr., Maxey Dell Jr.).
BOARD OF PAST PRESIDENTS—H. Phillip Hampton, Walter C. Jones, John D. Milton, George S. Palmer, W. W. Quillian, W. C. Roberts, Leo M. Wachtel (Absent—Orion O. Feaster, F. K. Herpel, Ralph W. Jack, Edward Jelks, F. H. Langley, Duncan T. McEwan, Robert B. McIver, W. C. Payne Sr., Eugene G. Peek Sr., W. M. Rowlett, Joseph S. Stewart, W. C. Thomas Sr.).

Motion was carried to adopt the Rules and Order of Business of the House as follows:

The Rules and Order of Business for the House of Delegates is included in this Handbook.

Delegates and alternates whose names appear in this Handbook have been certified by their county medical societies. Our By-laws do not permit an alternate to serve for a delegate who has once been seated. The By-laws require that delegates fill out attendance cards at each meeting of the House of Delegates in order to be credited in attendance, and further, the Chairman of the Credentials Committee is required to report to the House the number of delegates who have registered their attendance cards, thus eliminating the necessity of a roll call to seat delegates.

Reports and resolutions that were received before going to press are included in this Handbook. Delegates are urged to study them carefully before they are introduced in the House. Whenever possible, it is requested that resolutions and supplemental reports be forwarded to the Association's executive office by April 30 for duplication and distribution to the delegates.

All reports and resolutions will be referred to Reference Committees by the Speaker at the First Meeting of the House of Delegates. All members who are interested in any committee report or resolution are invited to attend the Reference Committee meetings where a full discussion will take place. Council and committee chairmen are respectfully requested to be present and discuss their respective reports. All members of Reference Committees are urged to study carefully the reports and resolutions referred to them. The chief purpose of the Reference Committees is to allow an opportunity for as many members of the Florida Medical Association as possible to appear and be heard and thus have a voice in the business of the Association. In addition, discussions before the Reference Committees have the added advantage of avoiding long discussions at the meetings of the House of Delegates. Members may request the Reference Committee chairman to defer items in which they are interested in order that they may be present to discuss the subject.

A resolution before the Reference Committee should have a sponsor present before the Reference Committee. All resolutions must be filed by 12:00 noon on the day of the First Meeting of the House of Delegates, typewritten and in proper form. The resolutions so presented will be duplicated and available at the Reference Committee meetings when they convene. Your attention is called to the format of the annual meeting, where the Reference Committee meetings will be held in the morning following the First Meeting of the House. We also plan to have all Reference Committee reports duplicated and available to the delegates at the Registration Desk on the morning of the day the Second House of Delegates meets in the afternoon. We trust these provisions will result in an efficient and informed House of Delegates.

According to our By-laws, nomination and seconding speeches shall be limited to a maximum of two minutes each. If additional information needs to be presented to the House, it should be duplicated and distributed to members of the House.

Your Speaker and Vice-Speaker are available at any time to help in any way in the preparation of resolutions or in any capacity in which they might help any member of the Florida Medical Association.

Charles K. Donegan, Speaker
House of Delegates
Franklin J. Evans, Vice-Speaker
House of Delegates

The following corrections were made in the Proceedings of the 1969 House of Delegates as published in the July 1969 issue of the Journal: The addition of the name of Dr. Maximilian A. Crispin as a seated delegate from Palm Beach County, and Dr. J. Gerard Converse as a seated delegate from Polk County.

Motion was carried to approve the minutes of the last meeting as corrected.

The Speaker introduced the officers of the Association: Drs. Henry J. Babers Jr., President; James T. Cook, President-Elect; Jack Q. Cleveland, Immediate Past President; Floyd K. Hurt, Secretary-Treasurer; Franklin J. Evans, Vice Speaker of the House, and Mr. W. Harold Parham, Executive Vice President. Dr. Russell B. Carson, Vice President, was not present.

The Speaker then instructed the House.

Remarks of the Speaker

This is your House of Delegates. We are here today representing 7,000 physicians in the State of Florida. We are here to make policies for the members of the Florida Medical Association for the coming year.

The House of Delegates transacts business according to a blend of rules imposed by its By-laws, established by tradition, decreed by its presiding officer, and for the first time, pursuant to Sturgis' Standard Code of Parliamentary Procedure, Second Edition, in place of Robert's Rules of Order that we had used in the past. Parliamentary law serves to aid an assembly in orderly, expeditious and equitable accomplishment of its desires. Any compulsive adherence to an inflexible set of directives may thwart rather than abet such an objective.

The majority opinion of the House in determining what it wants to do and how it wants to do it should always remain the ultimate determinant.

It is the obligation of the Speaker to sense this will of the House, to preside accordingly, and to hold his rulings ever subject to challenge from and reversal by the assemblage.

This year in striving to improve the efficiency of our House, there will be three sessions of the House of Delegates. This one; the second meeting on Saturday at 3:00 p.m. and the third meeting Sunday at 9:00 a.m.

Let me urge each delegate to conscientiously attend the reference committee meetings—freely express your views and opinions to the reference committees, in order that they may make sound recommendations to this House of Delegates.

Further, study the reference committee reports carefully Saturday morning, in order that we can make sound, well thought-out decisions on Saturday afternoon.

This year the reference committee reports will have each line numbered in order to clarify amendments made on the floor.

Your Speaker and Vice Speaker will be available to assist you in every way possible. Thank you.

The Speaker introduced the distinguished guests: Mrs. Charles H. Gilliland, President of the Woman's Auxiliary to the Florida Medical Association; Mrs. Arnold J. Spanjers, President-Elect of the Woman's Auxiliary; and Mrs. G. Prentiss Lee, First Vice President of the Woman's Auxiliary to the American Medical Association.

Mrs. Gilliland greeted the House of Delegates on behalf of the Auxiliary and reported that her main objective during her year as president of the Auxiliary was to improve on the part of both Association members and Auxiliary members the knowledge of the purposes and objectives of the Auxiliary. She spoke of the public relations value to the Association of the Auxiliary's work, and of its efforts to stimulate interest among doctors and their wives, as well as wives of medical students who will be the auxiliary leaders of tomorrow.

Mrs. Gilliland briefly reviewed the methods which had been used during the year to further these goals. She stated in closing that it had been a privilege to work with the President of the Association, Dr. Babers, through the year, and the other FMA officers, and expressed the hope that the Auxiliary had been of service.

The Speaker introduced Mr. Burton Young, President-Elect of The Florida Bar.

Mr. Young brought greetings from the more than 10,000 lawyers and judges in Florida. He said that our nation is experiencing from within the severest test of its survival since the Civil War, and that this democracy must rise to challenge its tormentors. He pointed to the real breakdown of our moral code, and its traumatic effect on our so-called constitutional rights—life, liberty and the pursuit of happiness. He said we of America have no reason to rob and steal; yet, every day in America there is a murder, a robbery every four minutes, a car stolen every 40 seconds and a burglary every 28 seconds. He asked if, by our silence, we condone these actions of the radicals and extremists. He lamented the campus disorders, and said that we have conquered the complexities of the space beyond our world, but we cannot learn to live in peace with each other.

Mr. Young said that the only change for betterment of mankind's life must be wrought step by step, from one generation to another, without force, without arms, but with reason and the capacity to accept and improve upon new ideas and ideals. But, he said, we as free men know that the changes must be examined for truth, and must come from within the law.

In closing: "Thus, we are truly the physicians of society's maladies; as professional men and women, we then have a real concern for America because we cannot fulfill our highest capacity as individuals except in terms of our fellow man. We derive strength from stimulation from others so it becomes vital that society be healthy and that it can be free and open. To that noble end, for which there is no acceptable alternative, let us meet the challenge lest we perish from this earth."

The President, Dr. Henry J. Babers Jr., took the Chair. He presented the A. H. Robins Company Annual Award "For Outstanding Community Service by a Physician" to Dr. Reed Bell of Pensacola. Dr. and Mrs. Bell were escorted to the podium by Drs. William Thompson and William Wilhoit.

A. H. Robins Company Award
"FOR OUTSTANDING COMMUNITY SERVICE BY A PHYSICIAN"

Reed Bell, M.D., of Pensacola is recipient of the A. H. Robins Company Award for 1970, an honor accorded annually to a member of the Florida Medical Association for distinguished services in civic and community activities. Dr. Bell was selected by the Association's Board of Governors from among candidates nominated by the component medical societies. His dedicated efforts to establish the Sacred Heart Children's Hospital in Pensacola and sacrifice of time to make the community and particularly its youth aware of the dangers of drug abuse personify the practice of medicine in the highest tradition of service.



Dr. Babers presents the A. H. Robins Company Award to Dr. Reed Bell with Mrs. Bell looking on.

Dr. Bell was born in Pensacola in 1927, son of Mrs. M. Langley Bell Sr., and the late Mr. Bell who served as clerk of the Circuit Court for many years. He played football at Pensacola High School, attended the University of Florida one year, joined the United States Navy and after discharge entered the University of the South at Sewanee, Tenn. He was captain of the football team in 1947. Duke University School of Medicine conferred the Doctor of Medicine degree upon him in 1952 and he took further training in pediatrics and pediatric endocrinology prior to entering practice in Pensacola in 1957. He married the former Nellanne Ham of Pensacola 19 years ago and they have six children.

Dr. Bell relinquished private practice in March 1969 to devote full time to the Pensacola Foundation for Medical Education and Research as a consultant and teacher. He is medical director of Sacred Heart Children's Hospital and assistant director of medical education for pediatric services.

The hospital containing 66 beds is one of only a few located in cities comparable in size to Pensacola. The original structure was planned as a school of nursing and never used since a college assumed this responsibility. Inspired by Dr. Bell's efforts and devotion to development of the institution, his colleagues joined with him in gaining the necessary financial support to make the facility possible. Through the medical staff, it provides specialized treatment for children in northwest Florida and south Alabama as well as serving as an institution for the training of pediatricians.

Children always have been a primary concern to Dr. Bell. Explaining the reason he gave up private practice last year, he stated that so many services for children needed to be developed in the area and the opportunity presents itself in the hospital.

His part in development of Children's Hospital and devotion to the welfare of children and young people in Escambia County earned him the Pensacola News-Journal's Page One Award in November 1969.

As President of the Escambia County Medical Society in 1969, Dr. Bell initiated a series of newspaper articles on drug abuse. These were published in conjunction with radio and television programs on which his colleagues warned of the dangers of drugs. Space donated by three billboard companies was used to warn young people of the hazards. Dr. Bell personally concerned himself with the activity, regularly speaking out to student and other groups on the subject.

Dr. Bell is a member of the advisory committee for Pensacola high schools, member of the sex education committee of the Escambia County School Board, board member of the Greater Pensacola Association for Learning Disabled, and chairman of the Escambia-Santa Rosa Health Planning Council. He is a director of the Escambia County Clinic, trustee of the University of the South, member of the Pensacola Rotary Club, and a vestryman at St. Christopher's Episcopal Church.

In addition to his concern with the community's image of the physician and the practice of medicine, Dr. Bell is active in his specialty as a member of the fetus and newborn committee of the Florida Pediatric Society, consultant to the Florida Crippled Children's Commission and member of the clinical faculty of the University of Florida College of Medicine.

Dr. Bell: "It goes without saying how much this is appreciated, this significant and wonderful honor. I would like to take this opportunity to recognize this award in the context of my medical colleagues in Pensacola and Escambia counties, particularly of the fine medical community we have, and I accept in recognition of the work they have done as a medical community for the general community. Thank you."

Dr. Babers presented a Certificate of Grateful Recognition to Mr. H. A. Schroder, Executive Vice President of Blue Shield of Florida, Inc. Mr. Schroder was escorted to the podium by Drs. Warren W. Quillian and W. Dean Steward.

Resolution of Grateful Recognition

Whereas, Hilary Aiden Schroder, of Jacksonville, Florida, has rendered distinguished and able service to the medical profession and citizenry of the State of Florida since 1946; and

Whereas, This dedicated executive was born in New Orleans, La., in May 1905; attended New Orleans public schools and studied at Tulane University; and

Whereas, This eminent gentleman was associated with Whitney National Bank in New Orleans from 1921 to 1936 and Hospital Service Association of New Orleans from 1936 to 1946; and has served as President of Blue Cross of Florida, Inc. and Executive Vice President of Blue Shield of Florida, Inc. since 1946; and has further served on the Board of Directors of Blue Cross of Florida, Inc., Blue Shield of Florida, Inc., American Red Cross—Duval Chapter, Florida National Bank and Blue Cross Association, and

Whereas, This vigorous administrator has served as President of Blue Cross of Florida, Inc., and Executive Vice President of Blue Shield of Florida, Inc., during a period of tremendous growth; in 1946, there were 63,000 subscribers to Blue Cross and 516 subscribers to Blue Shield. Today, under Mr. Schroder's leadership, Blue Cross numbers in excess of 1,221,000 subscribers, while Blue Shield counts over 1,180,000 subscribers, for a total of 1,225,000 individuals with coverage; therefore be it

RESOLVED, That a Certificate of Grateful Recognition be presented to Hilary A. Schroder as a token of the warm appreciation that the officers, members and executive staff of the Association hold for the many years of outstanding service rendered by this fine gentleman.

Mr. Schroder: "I have appreciated the opportunity of working with so many fine men in the 24 years I have been in Florida. This organization has come through many trials and tribulations. We have tried hard; we have not pleased everybody, but we have done our best. We have a dedicated staff and a cooperative board of directors. I would like to take this opportunity to thank both of them. Thank you very much for the privilege of working with you."

Dr. Donegan, Speaker, resumed the Chair and introduced the President, Dr. Henry J. Babers Jr.

Dr. Babers then presented his annual address. (The complete text of President Babers' address begins on page 19).

The Speaker announced the correction of a minor error in the Handbook.

The Speaker introduced Dr. Eugene G. Peek Jr., President of the Florida Medical Foundation. Dr. Peek gave an annual report of the activities of the Foundation; the report was referred to Reference Committee No. III for consideration.

Dr. Evans, Vice Speaker, assumed the Chair, and announced the personnel of Reference Committees and the times and places of their meetings.



Dr. Eugene G. Peek Jr., President of the Florida Medical Foundation presenting his annual report.

MEETINGS OF REFERENCE COMMITTEES:

Thursday morning, May 7

I. 9:30 a.m. Health and Education
Convention Hall Room A

II. 10:00 a.m. Public Policy
Convention Hall Room B

III. 10:30 a.m. Finance and Administration
Tack Room

IV. 10:00 a.m. Legislation and Miscellaneous
Embassy Room

V. 9:30 a.m. Medical Economics
Card Room

I. Health and Education
Donald F. Marion, *Chm.*
William C. Ruffin Jr.
Courtlandt D. Berry
Harold W. Johnston
Charles F. Tate Jr.

II. Public Policy
Thomas B. Thames, *Chm.*
John C. Fletcher
Dewitt C. Daughtry
Miles J. Bielek
James L. Borland Jr.

III. Finance and Administration
Richard C. Clay, *Chm.*
Richard G. Connar
Abbott Y. Wilcox
Truett H. Frazier
James C. Pringle Jr.

IV. Legislation and Miscellaneous
Francis C. Coleman, *Chm.*
Karl B. Hanson
Ray E. Murphy Jr.
Rufus K. Broadaway
Robert N. Webster

V. Medical Economics
Thad Moseley, *Chm.*
William M. Straight
Douglas W. Hood
Robert L. Andreae
Earl G. Wolf

The Vice Speaker read the lists of reports and resolutions referred to Reference Committees, as published in the Handbook. He also called the House's attention to the referrals of supplemental reports and resolutions which had been distributed in the Delegates' Packets. Changes in referrals were pointed out: Resolution 70-27 was referred to Reference Committee No. III rather than No. I as was indicated on the printed resolution; Resolutions 70-35 and 70-36 were referred to Reference Committee No. IV rather than No. III as was indicated on the printed resolutions.

The Chair recognized Dr. William M. Straight, Chairman of the Committee on Archives, who presented the Supplemental Report of the Committee.

Dr. Straight: "Mr. Speaker, fellow physicians and guests: At this moment in the first meeting of the House of Delegates, we would like to recognize those members who joined the Florida Medical Association in the years 1940 and 1941. Would these members please stand at this time. We have affixed to their convention badges a ribbon in honor of this event." These members stood and were recognized.

"For the next few moments we ask your reverent contemplation of our colleagues and friends who during the past year have left us for the life hereafter. Their names appear in your delegates' packet and each is represented by a rose in the vases upon the speakers' podium. Although their faces are no longer among us, they are not dead for:

"There is no death! the stars go down
To rise upon some other shore,
And bright in Heaven's jeweled crown,
They shine forevermore."
—John Lickey McCreary

The House stood for a moment of silent contemplation in commemoration of these, their colleagues.

Dr. Straight's report was referred to Reference Committee No. III. The remaining reports and resolutions were referred as indicated on the printed report in the packets.

The Speaker asked if there were any reports from the floor. None were presented.

The Speaker announced the Blue Shield meeting to be held at 8:00 a.m. on Thursday, May 7; the General Session to be held at 11:00 a.m. on Friday, at which time Dr. Alfred M. Freedman will present the Abel S. Baldwin Memorial Lecture; and the FLAMPAC-Auxiliary luncheon on Friday, May 8, at 12:15 p.m.

The House of Delegates recessed at 5:15 p.m., to reconvene on Saturday, May 9, 1970, at 3:00 p.m.

Second House of Delegates

The second meeting of the House of Delegates convened at 3:00 p.m. on Saturday, May 9, 1970, in the Regency Room of the Diplomat Hotel, Hollywood-by-the-Sea, with Dr. Charles K. Donegan, Speaker of the House, presiding.

Dr. Thompson, Chairman of the Credentials Committee, reported 247 delegates present, representing a quorum of eligible delegates and a majority of component county medical societies represented. Dr. Thompson moved that the House be seated.

Motion carried.

DELEGATES

ALACHUA—John W. Andrews, Billy Brashear, Edward G. Byrne, George T. Singleton, I. Irving Weintraub (Absent—J. Russell Green Jr., William C. Ruffin Jr.).

BAY—(Absent—John F. Mason Jr., James A. Poyner).

BREVARD—Jack Bechtel, Donald Bryan, N. Frank Fain Jr., Michael Foley, John Kaminski, Robert Seelman, Joseph Von Thron.

BROWARD—Miles J. Bielek, Robert J. Brennan, Gordon B. Carver, Frederick W. Fisher, David C. Lane, John R. Mahoney, J. G. McAllister, John H. Mickley, Ray E. Murphy Jr., Henry D. Perry Jr., Diran M. Seropian, Daniel C. Smith, Robert J. Steinborg, W. Dotson Wells, John I. Williams (Absent—Richard S. Doyle, Paul E. Gutman, Robert U. Moersch, Robert H. Pfeifer, Robert L. Andreae).

CHARLOTTE—Carl N. Reilly.

CLAY—William A. Mulford.

COLLIER—Courtlandt D. Berry, Fred A. Butler.

COLUMBIA—Frank E. Adel.

DADE—William G. Aten Jr., Morris Blau, Rufus K. Broadaway, James B. Byrne, Manuel L. Carbonell, Gerard Carter, Richard C. Clay, Francis Cooke, Vincent P. Corso, Edward Cullipher, John E. Cunio, Dewitt C. Daughtry, Joseph Davis, Richard C. Dever, Robert F. Dickey, Lee Dockery, L. W. Dowlen, Miguel Figueroa, Joseph Fitzgerald, M. Eugene Flipse, James J. Goodman, Leo Grossman, Marshall Hall, Henry Hardin, Claude D. Holmes Jr., James W. Holmes, James J. Hutson, Walter Jones III, Simon I. Kemp, H. A. P. Leininger, Seymour B. London, Ronald Mann, Donald Marion, Ildefonso R. Mas, Charles A. Monnin Jr., Sheldon D. Munach, G. B. Paxton Jr., James C. Pringle Jr., M. Murray Schechter, Daniel L. Seckinger, Alan J. Serrins, Everett Shocket, Donald Stannus, Chauncey Stone Jr., Mario Stone, William Straight, Charles F. Tate, Maynard Taylor, Arthur Wood Jr., Scheffel Wright, Nelson Zivitz (Absent—Julius Alexander, David J. Becker, Chester Cassell, Milton Coplan, Victor D. Dembrow, Milton Goldman, Maurice Greenfield, Jim C. Hirschman, Paul Jarrett, Albert C. Jaslow, Robert Katims, Walter Sackett Jr., Gilbert B. Snyder).

DESOTO-HARDEE-GLADES—Calvin Martin.

DUVAL—James L. Borland Jr., Robert J. Brown, Clyde M. Collins, James H. Corwin II, Thomas S. Edwards, Joseph Farrington, John J. Fisher, Stephen P. Gyland Jr., Donald R. Hagel, Karl B. Hanson, L. E. Masters, Thad Moseley, Harry W. Reinstine Jr., C. Burling Roesch, John A. Rush Jr., Guy T. Selander, William A. Van Nortwick, James W. Walker.

ESCAMBIA—W. A. Covell, Charles J. Kahn, Julian O. Olsen Jr., Philip B. Phillips, Earl G. Wolf (Absent—Lockland V. Tyler).

FRANKLIN-GULF—Joe Hendrix.

HIGHLANDS—(Absent—Donald C. Hartwell).

HILLSBOROUGH—Richard H. Blank, Ernest R. Bourkard, Francis C. Coleman, John C. Fletcher, Richard S. Hodes, James M. Ingram, Victor H. Knight, Eugene B. Maxwell, W. Mahon Myers, Charles L. Pope, William W. Trice, Harold L. Williamson, James A. Winslow, Henry L. Wright (Absent—Richard G. Connar).

INDIAN RIVER—Hampton L. Schofield, David Tingle.

LAKE—J. Basil Hall (Absent—Bergon F. Brokaw).

LEE-HENDRY—James L. Bradley, Larry P. Garrett, H. Quillian Jones Sr., Edward W. Salko.

LEON-WAKULLA-JEFFERSON—E. G. Haskell, N. H. Kraeft, George N. Lewis, Robert N. Webster.

MADISON—(Absent—A. F. Harrison).

MANATEE—Irving Hall, Roger Meyer, Joseph Newhall.

MARION—Alex Goulard, Henry Harrell.

MONROE—Jaime M. Benavides.

NASSAU—(Absent—Cecil B. Brewton).

OKALOOSA—W. W. Thompson (Absent—Malcolm C. Crotzer).

ORANGE—Axel W. Anderson, Norman F. Coulter, Robert W. Curry, Joseph Flynn, Truett H. Frazier, Howard B. Goodrich, Paul C. Harding, David Hicks, Robert T. Hoover, Harold W. Johnston, Louis C. Murray, George A. Neder, Edward W. Stoner, Thomas B. Thames, Miles W. Thomley.

PALM BEACH—Carl E. Andrews, Vernon B. Astler, James R. Brandon, Jerry F. Cox, Maximilian A. Crispin, John J. Farrell, James R. Forlaw, Bernard Kimmel, Richard B. Moore Jr., H. John Richmond, L. Myrl Spivey, Governor M. Witt, Harold A. Yount.

PANHANDLE—William F. Brunner, James B. O'Connor.

PASCO-HERNANDO-CITRUS — James W. Basinger, Samuel R. Miller Jr.

PINELLAS—Joseph A. Ezzo, Allyn B. Giffin, Douglas W. Hood, David S. Hubbell, Charles A. Johnson, John T. Karaphillis, Charles H. Lasley, Jack A. MaCris, Donald G. Nikolaus, Thomas M. Quehl, James M. Stem, George H. Welch Jr., Abbott Y. Wilcox Jr., Walter H. Winchester, Rowland E. Wood (Absent—William H. Keeler III, Richard C. Trump).

POLK—James R. Boulware III, J. Gerard Converse, Howard M. DuBose, Spencer R. Garrett, John W. Glotfelty, Willard E. Manry Jr., John H. Miller, John C. Moore Jr., Angelo P. Spoto Jr.

PUTNAM—(Absent—Roy E. Campbell).

ST. JOHNS—William W. O'Connell.

ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.

SANTA ROSA—(Absent—John P. Merchant).

SARASOTA—Irving A. Beychok, John M. Butcher, Samuel E. Kaplan, Franklin H. Pfeiffenberger, Karl R. Rolls, Millard B. White.

SEMINOLE—Fred Ionata, Luis Perez.

SUWANNEE-HAMILTON-LAFAYETTE — (Absent—Hugo F. Sotolongo).

TAYLOR—Bart Knight.

VOLUSIA—Bob Bullwinkel, Thomas D. Cook, James Demming, William H. Harrison Jr., Richard W. Snodgrass (Absent—Robert L. Stevenson).

WALTON—(Absent—Howard F. Currie).

COUNCIL ON SPECIALTY MEDICINE—Frederick C. Andrews, James D. Beeson, Jack H. Bowen, Andre S. Capi, James W. Clower Jr., Emmet F. Ferguson Jr., John M. Hamilton, Joseph G. Matthews, William T. Mixson, Sanford A. Mullen, Edward J. Sullivan Jr. (Absent—West Bitzer, David W. Goddard, Samuel G. Hibbs, Robert E. Raborn, Richard G. Skinner Jr.).

DELEGATES TO AMA—Francis T. Holland, Jere W. Annis, Robert E. Zellner, (Absent—Burns A. Dobbins Jr.).

PAST PRESIDENT AMA—(Absent—Edward R. Annis).

OFFICERS AND BOARD OF GOVERNORS—Henry J. Babers Jr., Jack Q. Cleveland, James T. Cook, James F. Cooney, William J. Dean, Charles K. Donegan, Franklin J. Evans, Richard M. Fleming, Floyd K. Hurt, Eugene G. Peek Jr., W. Dean Steward, William M. C. Wilhoit, (Absent—Russell B. Carson, J. Maxey Dell Jr.).

BOARD OF PAST PRESIDENTS—Samuel M. Day, H. Phillip Hampton, John D. Milton, George S. Palmer, W. W. Quillian, W. C. Roberts, W. C. Thomas Sr., Leo M. Wachtel (Absent—Orion O. Feaster, F. K. Herpel, Ralph W. Jack, Edward Jelks, Walter C. Jones, F. H. Langley, Duncan T. McEwan, Robert B. McIver, W. C. Payne Sr., Eugene G. Peek Sr., W. M. Rowlett, Joseph S. Stewart).



Dr. Babers pays tribute to Mrs. Mae Mason for her outstanding service to organized medicine over a span of 21 years.

President Babers assumed the Chair to make presentations to the medical school deans of unrestricted contributions from the AMA-ERF. He asked the deans to come forward to accept the checks.

Dr. Emanuel Papper, Dean, accepted the contribution for the University of Miami School of Medicine in the amount of $4,279.43. Dr. Emanuel Suter, Dean, accepted the contribution for the University of Florida College of Medicine in the amount of $3,949.14. Dr. Donn L. Smith, Dean, accepted for the University of South Florida College of Medicine in the amount of $625.00.

Dr. Babers requested that Mr. Parham, the Executive Vice President, escort Mrs. Mae Mason to the podium. He said that Mrs. Mason has worked with the Association for many years, and will retire on June 30, 1970. He presented her with a check and an orchid on behalf of the Association, and the House accorded her a standing ovation.



President Henry J. Babers welcomes the deans from the three medical schools: Emanuel Suter, Dean, University of Florida College of Medicine; Emanuel Papper, Dean, University of Miami School of Medicine, and Donn L. Smith, Dean, University of South Florida College of Medicine.

The Speaker recognized Dr. Edward Haskell of Tallahassee.

Dr. Haskell introduced Jack Mathews, President of the Florida Senate.

Senator Mathews spoke on the changes which have taken place in Florida during the past several decades, and the changes he anticipates in the future—such as those in the field of conservation, pollution, and ecological legislation. He said there is much legislation of interest to the medical profession, and urged physicians to become more involved, while complimenting their present involvement. In closing, he invited those present to visit the legislative proceedings in Tallahassee during the session.

Dr. Ray E. Murphy, Broward County: "Mr. Speaker, may I present an emergency resolution. It is nonpolitical, noncontroversial, and is in regard to support for the President of the United States."

There was no objection expressed; the House granted unanimous approval to the presentation of the resolution. Dr. Murphy read the resolution, it was seconded and adopted unanimously.

Resolution

Support of The President of the United States of America

Whereas, The Florida Medical Association is composed of men dedicated to the preservation of life and dignity, and who are equally dedicated to the United States as a sovereign republic, and

Whereas, We as professonals are daily endeavoring to improve the health and welfare of our citizens, and

Whereas, As citizens of this great nation, we support the activities of our country's representatives at home and abroad: We hereby

RESOLVE That this Association declares its steadfast support and encouragement to the President of these United States in his foreign policies during these trying times, and the members of the Armed Forces who are carrying out these policies. We further acknowledge our indebtedness to the members of the National Guard who respond to the call of duty to insure our domestic tranquility.

The Speaker called for the report of Reference Committee No. 1.

Report of Reference Committee No. I
Health and Education

Dr. Donald F. Marion, Chairman of Reference Committee No. I, came forward to present the report of the reference committee.

Dr. Marion: "Mr. Speaker, members of the House: Your Reference Committee on Health and Education has considered each of the items referred to it and submits the following report. The Committee's recommendation on each item will be submitted separately before proceeding to the next."

Council on Scientific Activities

"The Reference Committee considered the report of the Council on Scientific Activities and suggests the following amendments:

"On page 20, paragraph 1, line 11*—Medical Schools—delete the words 'other committees' and substitute the words 'a specific committee' so that the sentence will read:

"—After considering all sides, it was the committee's opinion that the basic problem still exists but, since the medical school apparently is no longer involved, the matter should be the responsibility of a specific committee in the Association's structure."

Motion carried.

"On page 22, paragraph 3, line 24—Recommendations—add a sixth recommendation to read:

"6. That the Committee on Medical Schools be requested annually to provide the House of Delegates cumulative statistics from each medical school concerning the location and type of practice of the graduates of our medical schools five years after graduation.

"Mr. Speaker, I recommend the approval of the report of the Council on Scientific Activities as amended."

Motion carried.

*This and similar such references which follow are from the 1970 House of Delegates Handbook, a copy of which you might obtain from your own society delegate. A few copies are available from the FMA headquarters office.

Council on Scientific Activities

RICHARD C. DEVER, *Chairman*

The Council met February 8, 1970, in Miami, to consider the activities of its committees and to formulate recommendations to the Board of Governors and House of Delegates to further the scientific and medical education programs of the Association.

During the year, the Council answered inquiries to the Association on subjects within its scope of responsibility. The chairman attended the annual meeting of the Association of American Medical Colleges held in November 1969, in Cincinnati, Ohio, and the Council agreed that the Association should continue to send representatives to this meeting each year to keep abreast of information in this field. The Council also considered at length and formulated recommendations upon matters referred by the House of Delegates and/or Board of Governors, such as the implementation of a State Commission on Medical Education, a clinic program in Collier County proposed by the University of Miami School of Medicine, and resolutions 69-16 ("Family Practice") and 69-17 ("Medical Education").

Because most of the Council's activities were conducted by its individual committees, a brief summary of each committee's work for the year will be presented. The one exception will be the Committee on Regional Medical Program, which was established in 1969 and did not meet as such during the year. The Council's deliberations on this subject will appear in lieu of that Committee's summary. Recommendations of the Council will conclude the report.

The Committee on The Journal and Other Publications continued to strive to improve the appearance and content of the Journal. Evidence of the success of these efforts was the specific selection of the Florida Journal for special and increased advertising by several national pharmaceutical houses. Although advertising revenue continued to be lower than average in 1969, volume increased and appeared to be entering an upward trend early in 1970. Attempts were made to expand the Journal not only as a vehicle for scientific publication but as a regular source of timely organizational news and comment. Underlying all, the basic editorial philosophy was followed that the Journal be a reflection of Florida and the medicine practiced there.

The Committee on Medical Schools carefully studied a proposal by the University of Miami School of Medicine to establish a program to furnish medical care to migrant agricultural workers in the Immokalee area of Collier County. Efforts to establish the project brought about a local movement to provide this care with a different approach. Due to various problems encountered, the university discontinued its efforts, indicating that the project would be reopened only if all segments of the community invited it. After considering all sides, it was the committee's opinion that the basic problem still exists but, since the medical school apparently is no longer involved, the matter should be the responsibility of a specific committee in the Association's structure.

After considering the University of Miami Collier County project and the status of the University of Florida's ongoing clinic at Mayo in Lafayette County, the committee agreed that the need for universities to participate in such activities must be recognized and that disagreements and misunderstandings are unfortunate and to be avoided. With this in mind, the Committee is drafting, in consultation with the medical schools, guidelines for participation in community medical service projects by medical schools.

The Committee considered at length the proposal adopted by the House of Delegates in 1969 to establish a Joint Commission on Medical Education. Specific recommendations to implement this new body were formulated.

Resolution 69-16, calling for the establishment of family practice departments in the medical schools, which was adopted by the House of Delegates in 1969 and referred to the committee by the Board of Governors, was taken up in conjunction with the medical schools and an appropriate recommendation was carefully developed.

Resolution 69-17, requesting establishment of a two-year medical program in the basic sciences at Florida State University, which was referred to the Board of Governors and in turn to the Committee, was studied with a resulting recommendation.

The Committee also took under advisement with the medical schools the fiscal management of teaching programs, temporary licensure for faculty members, expansion of physical therapy training programs, and the teaching of medicolegal jurisprudence, ethics and occupational health.

The Committee on Postgraduate Education continued to review applications for Association approval or cosponsorship of postgraduate or continuing education programs in the state. It was requested by the Council to assume responsibility for planning and holding a second statewide conference on medical education, as authorized by the House of Delegates in 1969 as a sequel to the first such conference which was held in February of that year.

The Committee on Regional Medical Program is the newest committee of the Council, having been established by the House of Delegates in 1969. Although the Council was furnished a detailed history of the Florida Regional Medical Program to date, the Council expressed concern about the direction in which the program appears to be progressing in accumulating a large administrative staff and in establishing subregional offices. In considering the present composition of the Committee, the Council questioned whether a group so closely involved with the corporate program itself could be sufficiently objective to be an effective observer for the Association and to bring about needed changes in the interest of Florida's citizens and medical profession.

The Committee on Research continued to serve as an advisory committee to the Florida Medical Foundation



Reference Committee I personnel were Drs. Eugene P. Peek Jr., AMA Alternate for Dr. Dobbins, Courtlandt D. Berry, Harold W. Johnston, Donald F. Marion (Chairman), Charles F. Tate Jr. and William C. Ruffin Jr. Mrs. Linda Flowers was recording secretary.

board of directors to screen research grant applications. In noting the Committee's relatively restricted role and lack of involvement in other aspects of the Foundation's research activities, the Council made a series of recommendations to the Foundation's board designed to keep the Committee more fully informed of the disposition of its recommendations and to broaden its functions.

The Committee on Scientific Assemblies, as program committee for the Association's annual meeting, decided to continue for 1970 the format initiated in 1969 in which those state specialty societies desiring to do so sponsor FMA scientific sections. Participating specialty societies plan and produce the sections, with partial financial assistance from the Association. In addition to the various scientific sections, the 1970 program will feature special sections on medical education, mental retardation, and medicine and religion. The Committee evaluated and selected scientific and educational exhibits from among a large number of applications.

RECOMMENDATIONS

1. That the Association give its highest commendation to Dr. Franz H. Stewart and his staff for their outstanding efforts in producing and improving the Journal.
2. That the problem of medical care for migrant agricultural workers in Collier County be referred to the Council on Medical Services with the suggestion that it be considered by the Committees on Rural Health and Public Health.
3. That, as authorized by the House of Delegates in 1969, a Joint Commission on Medical Education be established, the function of which would be to serve as (a) a state advisory and coordinating body for all levels of medical education, (b) an advisory group to the Florida Board of Regents on medical education matters, (c) a task force on continuing medical education for the medical schools of Florida, and (d) to assume the function of the FMA Committee on Medical Schools at a later date, if successful in its other roles. The membership, to be recommended for appointment by the President of the FMA and not to exceed 15 persons, would consist of the chairmen of the existing medical advisory committees to the three medical schools, the three deans ex-officio, and representatives of the FMA, directors of medical education of hospitals and the public at large, including the trustees of universities.
4. With reference to Resolution 69-16, "Family Practice," that each medical school in the state be requested to provide for some arrangement in its administrative and academic structure to carry out the principle of providing training for and increasing the number of family physicians.
5. With reference to Resolution 69-17, "Medical Education," that the Florida Board of Regents' program to increase the input of medical students via present undergraduate facilities and programs be endorsed.
6. That the Committee on Medical Schools be requested annually to provide the House of Delegates cumulative statistics from each medical school concerning the location and type of practice of the graduates of our medical schools five years after graduation.

Supplemental Report of Committee on Regional Medical Program

(Not considered by Council)

We are pleased to report that during the past year the Florida Regional Medical Program has continued to achieve progress. Its purposes are still to accomplish its stated objective of:

> To raise the levels of health care in Florida by assisting physicians, allied health professionals and their medical institutions in providing the highest quality patient care in their own communities, primarily for heart disease, cancer, stroke, and related diseases.

Recently more emphasis has been given to directing program activities more closely to the community level and district offices have been established or are in the process of establishment in the following communities: Pensacola, Tallahassee, Jacksonville, Daytona, Orlando, Tampa, Fort Myers, West Palm Beach, North Miami and South Miami.

The affairs of the Florida Regional Medical Program are operated by FRMP, Inc., the members of whose board are:

H. Phillip Hampton, M.D., Chairman, Florida Medical Association
Carl E. Andrews, M.D., Florida Medical Association
Clyde M. Collins, M.D., Florida Medical Association
Richard M. Fleming, M.D., Florida Medical Association
Mr. W. Harold Parham, Florida Medical Foundation
Emanuel M. Papper, M.D., Dean, University of Miami
Donn L. Smith, M.D., Dean, University of South Florida
Emanuel Suter, M.D., Dean, University of Florida
Freeman H. Cary, M.D., Director of Medical Education
Henry R. Cooper, M.D., Florida Heart Association
Mr. Baya Harrison, Public Representative
Louis C. Murray, M.D., Board of Regents
Wilson T. Sowder, M.D., Florida Division of Health
Ashbel C. Williams, M.D., American Cancer Society—Fla. Division
Mr. Michael J. Wood, Florida Hospital Association

Council on Specialty Medicine

"The Reference Committee considered the report of the Council on Specialty Medicine and recommends that it be approved with the following amendment:

"On page 26, paragraph 3, line 10,—Recommendation—delete lines 10 through 18 and lines 45 through 55 and substitute, beginning with the word 'Cosmetic,' lines 48 through 55 in the place of lines 10 through 18, so that the third paragraph, line 10, reads: "Cosmetic surgery is defined as surgery for the correction of imperfections in human proportions, both real and fancied. It has as its primary objective the restoration of symmetry of contour and improvement of appearance. Cosmetic surgery does not become reconstructive or therapeutic surgery because of psychological or psychiatric reasons."

"Mr. Speaker, I recommend the approval of the report of the Council on Specialty Medicine as amended."

Motion carried.

Council on Specialty Medicine

JOSEPH G. MATTHEWS, *Chairman*

The Council on Specialty Medicine meets three times a year. It consists of 42 committee chairmen, 16 of them representing the major medical and surgical specialties, and the other 26 are subcommittee chairmen representing the surgical specialty societies.

The purpose of the Council is to serve as a forum and sounding board for various specialties, for dissemination of information of mutual interest and concern and to help correlate activities which relate to the various specialties and specialty societies. Much time is spent in transmitting the information to the committeemen which, in turn, can be transmitted to the various specialties.

This year, the Council was asked to investigate and make recommendations pertaining to the community health project in Lafayette County, in the town of Mayo. This was done and reports back to the Board of Governors were made periodically.

The Council was also asked to make recommendations pertaining to a method of treatment of retarded children, commonly called the patterning treatment, or also called the Doman-Delacato method of treatment. The Council recommended that this be investigated by appropriate committees to see if this method of treatment is considered proper.

The Council has been kept advised of all the activities of the Committee on Relative Value Studies, and has been kept advised regarding the progress and lack of progress pertaining to negotiations with Florida Industrial Commission.

The Board of Governors has designated this Council to act as an advisor to the Committee on State Legislation when specialty legislation is concerned, and pointed out that any independent legal action by a specialty group to enact legislation must be approved and coordinated through the FMA legislative program.

The Council recommended that when a specialty society is divided into components within the state, that representatives from each component could serve as a subcommittee chairman but that overall activities of the committee should be coordinated as a single unit.

The Council has been asked to clarify the definition of cosmetic and functional reconstructive surgery.

RECOMMENDATION

That the following definition of the American Society of Plastic and Reconstructive Surgeons be approved [as amended]:

"Reconstructive surgery is defined as surgery a surgeon undertakes to restore normal appearance and/or function to any area altered by disease, trauma or congenital deformity.

"Cosmetic surgery is defined as surgery for the correction of imperfections in human proportions, both real and fancied. It has as its primary objective the restoration of symmetry of contour and improvement of appearance. Cosmetic surgery does not become reconstructive or therapeutic surgery because of psychological or psychiatric reasons."

(Note: The Council's recommendations concerning physical therapy were deleted by Reference Committee No. II. See discussion on page 41).

The Council feels that the Medical Practice Act should be appropriately amended to prevent practitioners in the crafts from expanding their treating privileges by legislative methods. (Referred to Board of Governors by Reference Committee IV).

The Council heard Dr. Emanuel Suter, Dean of the UF College of Medicine regarding physician training and future needs and feels that the doctors of Florida should cooperate in an investigative study to determine future needs for training doctors.

Board of Governors Actions

Action No. 8. Radiation Therapy

Dr. Marion: "The Reference Committee considered the Board of Governors Report, Action No. 8, and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 48).

Action No. 11. Postgraduate Education

Dr. Marion: "The Reference Committee considered the Board of Governors Report, Action No. 11, and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 48).

Recommendation No. 1. Resolution 70-11

Dr. Marion: "The Reference Committee considered the Board of Governors Report, Recommendation No. 1, and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 49).

Resolution 70-11

Abolishment of Cigarette Advertising on Radio and Television

Board of Governors

Dr. Marion: "The Reference Committee considered Resolution No. 70-11, 'Abolishment of Cigarette Advertising on Radio and Television,' and recommends that it be approved."

Motion carried.

Resolution 70-11

Abolishment of Cigarette Advertising on Radio and Television

Whereas, There is incontrovertible evidence on the dangers of cigarette smoking and,

Whereas, All medical agencies that have carefully evaluated the seriousness of this problem and its implications regarding death and total disability, and

Whereas, The continuous advertisements have played a major role in tempting the youths of America to indulge in cigarette smoking, and

Whereas, Many smokers with respiratory problems have attempted to stop smoking but due to the effects of advertising have gone back to smoking, and

Whereas, The effect of a resolution such as this will alert the public to the medical profession's great concern regarding this problem which is, in fact, the nation's number one preventable medical problem. Therefore, be it

RESOLVED, That the medical profession go on record urging the abolishment of cigarette advertising on television and radio.

Resolution 70-16
Medical Education

Escambia County Medical Society

"The Reference Committee considered the Resolution 70-16 and recommends its adoption with the following amendments:

"On lines 10 and 11 delete the words 'Escambia County Medical Society' and, also, 'Supports the Penrod'; and add 'Florida Medical Association' and 'Reaffirms its support for the Florida Plan' so that the sentence reads: "RESOLVED, That the Florida Medical Association strongly reaffirms its support for the Florida Plan of enhanced medical education in Florida, involving the universities of the state in the first year of medical education, the medical schools in the second and third years, and the community hospitals of the major metropolitan areas in the senior year of training, in order to increase both the quality and quantity of graduating physicians in Florida."

The Committee recommends further that the following be added:

"RESOLVED, That in the planning and development of such a program which will include several state universities and community hospitals, care must be given to close collaboration between these institutions in order to guarantee that the program is of high quality, is based on sound educational and academic principles and provides the student with a well-coordinated educational experience in medicine.

"RESOLVED, That it is further recommended that implementation of this plan be made as soon as possible."

Motion carried.

Resolution 70-16

Medical Education

RESOLVED, That the Florida Medical Association strongly reaffirms its support for the Florida Plan of enhanced medical education in Florida, involving the universities of the state in the first year of medical education, the medical schools in the second and third years, and the community hospitals of the major metropolitan areas in the senior year of training, in order to increase both the quality and quantity of graduating physicians in Florida;

RESOLVED, That in the planning and development of such a program which will include several state universities and community hospitals, care must be given to close collaboration between these institutions in order to guarantee that the program is of high quality, is based on sound educational and academic principles and provides the student with a well-coordinated educational experience in medicine;

RESOLVED, That it is further recommended that implementation of this plan be made as soon as possible.

Resolution 70-17
A Program for Aid to Medical Education and Distribution of Medical Care in the State of Florida

Sarasota County Medical Society

Dr. Marion: "The Reference Committee considered Resolution 70-17 and recommends that it be approved in principle but referred to the Board of Governors for further study [and implementation]."

Dr. Franklin Evans, Dade, pointed out that this recommendation is asking for legislation which would tax the doctors of Florida up to $20 apiece. He said that there is plenty of money now available (approximately $250,000) for medical education loans from the Florida Medical Foundation. He moved to amend the recommendation of the Reference Committee by striking the words "and implementation."

Dr. Dean Steward, Past President, spoke for the amendment to strike. The motion to amend carried.

The recommendation of the Reference Committee carried as amended, referring Resolution 70-17 to the Board of Governors for further study.

Resolution 70-17

(Approved in Principle)
REFERRED TO BOARD OF GOVERNORS FOR STUDY

A Program for Aid to Medical Education and Distribution of Medical Care in the State of Florida

Whereas, if we are to retain any influence on maintaining the private practice of medicine as the primary method of providing medical care, it would appear that we must become active in solving the problems of the distribution of medical services, and

Whereas, Whether we agree with those who claim that we have a shortage of physicians in the United States, we don't believe anyone would deny that we need more physicians for general practice and family care, and that this situation applies right in our own community in spite of a high ratio of physicians per capita, and

Whereas, If most present graduates are going into specialties with a resultant shortage of general practice, and some areas are unable to obtain physicians, what measures can we take to improve this situation? and,

Whereas, Most of us are aware of the present high cost of a medical education, and the fact that only a few, other than the well-to-do, can finance a medical degree. The affluence of our present graduates makes it possible

for them to practice in the more desirable locations and specialties, leaving many areas without services, and

Whereas, A plan by which students, who would otherwise be completely unable to finance their education, would be financed with the *agreement* in advance that they would establish general practice in an area of need for a *minimum period of time* has been proposed, and has been tried in a number of states, including Florida. However, because the amount of the aid has not been sufficient to actually be the deciding factor in the student obtaining a medical degree, and because the periods of required practice have been so long that it has been more attractive after graduation to borrow and repay the funds, these plans have failed in their objective, and

Whereas, It is quite possible that such a program could very successfully improve our physician distribution in the state, provided (1) That the amount of loan or scholarship made available would educate a young man who would not be so affluent as to be choosy as to his location and type of practice, and (2) That the term of compensatory practice should be short enough to make serving a term of practice a more attractive alternative than repaying a sizable loan, and

Whereas, The Florida State Legislature attempted such a scholarship program between the years 1955 through 1963. It was a failure because of the reasons listed above. It was dropped because the Legislature was reluctant to appropriate greater funds in light of the experience with the program, and

Whereas, Time has shown the government student loan programs are being dried up, the AMA student loan program, as well as the state medical association loan funds have failed to solve these problems, and

Whereas, Therefore, it is time for the medical profession to propose some constructive measures for the solution of these problems of medical economics and to participate in administering them, and

Whereas, Our past experience with the Florida Medical Scholarship has given us valuable experience in how to organize and administer such a program, and

Whereas, There is little doubt that, if a sound program were presented by the Florida Medical Association to our Legislature, we could obtain their complete cooperation and sufficient funds to make it work, and

Whereas, It is in view of these facts that we present to the Sarasota County Medical Society for approval and for reference to the House of Delegates of the Florida Medical Association for approval and implementation the following resolution, therefore be it

RESOLVED, That the Florida Medical Association shall, in cooperation with interested members of the Florida Legislature, cause to be prepared a bill to be presented to the Legislature of the State of Florida for enactment. The purpose of this bill will be to accomplish the following:

1. A fund shall be established called the Florida Medical Scholarship Loan Fund.
2. This Fund should be administered by the Florida Department of Professional and Occupational Regulations at the direction of the Florida Medical Scholarship Advisory Committee.
3. The membership of the Florida Medical Scholarship Advisory Committee should be made up of seven (7) physicians, recommended by the Florida Medical Association and appointed by the Governor.
4. This Fund shall be funded as follows: The Florida Board of Medical Examiners shall be authorized to levy an annual fee for license registration for medical practice, up to, but not to exceed, $20.00. The funds generated by these fees shall be assigned one-half each to the FBME and FMSLF. Each year an amount equal to those funds assigned from fees to the FMSLF shall be transferred from the State General Fund to the FMSLF. The FMS&L Advisory Committee shall be required to evaluate the funds available each year and recommend decreases in the registration fee when adequate funds are available.

   The Fund shall be administered as follows:

   (1) Loans shall be made to students who are residents of Florida for three years, who are admitted to or are enrolled in medical school, who have a satisfactory achievement record.

   (2) Preference in the greatest order shall be shown to students who on certified report of family income would be, to the satisfaction of the Committee, completely unable to finance a medical degree.

   (3) Preference shall be shown to students who agree to contract to do general practice in a qualified area of need in the State of Florida.

   (4) Scholarship loans up to $3000.00 per year may be awarded. These funds are to be disbursed at the beginning of each half year.

   (5) Within two years following graduation, the recipient shall *elect:* To do general practice in an area of need, as approved by the Committee, in the State of Florida, for a period of not less than three years for four years of loans. He may repay the loan, including interest accumulated at 6% per annum.

   (6) At the discretion of the Committee, scholarship recipients may be allowed to practice a specialty, if need is designated by the Committee.

Resolution 70-34
Separate Compartments for Smokers on Public Transportation

Dade County Medical Association

"The Reference Committee considered Resolution 70-34 and recommends that it be approved with the following amendments:

"The fourth paragraph, lines 21 through 23, be changed to read:

"RESOLVED, That the Florida Medical Association go on record as urging very strongly that the Federal Aviation Agency require all public air transportation suppliers to segregate smokers to minimize air pollution."

Motion carried.

Resolution 70-34
Separate Compartments for Smokers on Public Transportation

Whereas, It is a well known fact that smoking causes serious lung disease and is especially harmful to people who have any form of allergy or asthma, and

Whereas, Many people with asthma use public transportation and particularly when they are on planes are unable to leave the plane to avoid the cigarette smoke, thus being captive in a situation that frequently causes severe respiratory disease, and

Whereas, The Federal Aviation Agency is now holding public hearings regarding provision of separate compartments for smokers, therefore be it

RESOLVED, That the Florida Medical Association go on record as urging very strongly that the Federal Aviation Agency require all public air transportation suppliers to segregate smokers to minimize air pollution.

Dr. Marion: "The chairman wishes to express his appreciation to the members of the committee —Dr. William C. Rufñn Jr., Dr. Courtlandt D. Berry, Dr. Harold W. Johnston and Dr. Charles F. Tate Jr.—who worked so diligently. I particularly wish to thank the Association for the services of Mrs. Linda Flowers, our secretary, and those fine people who came to advise us."

"Mr. Speaker, this concludes the report of Reference Committee No. I."

Report of Reference Committee No. II
Public Policy

Dr. Thomas B. Thames, Chairman, presented the report of Reference Committee No. II, Public Policy.

Dr. Thames: "Mr. Speaker, your Reference Committee on Public Policy has considered each of the items referred to it and submits the following report. The Committee's recommendations on each item will be submitted separately and we request that each item be acted upon separately before proceeding to the next."

Council on Allied Professions and Vocations

"The Reference Committee considered the report of the Council on Allied Professions and Vocations and recommends the following amendments:

"On page 28, paragraph 12, line 53—Recommendation 7—delete the word 'Florida,' and on line 54, the words 'Society of Ophthalmology,' and substitute the words 'Proposed Board of Examiners, consisting of Ophthalmologists and Opticians, as now pending in the Florida Legislature,' so that the sentence will read:

"That the final approval of certification of qualified opticians to dispense contact lenses and suspension of previously granted certification shall be by the proposed board of examiners consisting of ophthalmologists [and opticians] as now pending in the Florida legislature."

Dr. David Lane, Broward: "I understand the bill as proposed in the legislature does not have opticians on the board. The board would be made up of three ophthalmologists."

Dr. Thames reported that the reference committee's recommendation was based on information given them that the bill would provide for both ophthalmologists and opticians.

Dr. Thomas Edwards, Duval, said that the bill had been changed several times; however, there was no particular objection, as long as it is either made up jointly of both, or all ophthalmologists.

Dr. Spencer Garrett, Polk: "I move that the recommendation be amended by deleting the words 'and opticians.'"

Dr. James Clower, Council on Specialty Medicine, spoke in favor of the amendment.

Following discussion, the amendment carried.

The motion as amended carried.

"On page 29, paragraph 1, line 18—Recommendation 8—add the word 'Registered,' so that the sentence will read:

"4) A utilization review committee composed of registered physical therapists should be established for the purpose of reviewing therapy given by physical therapists under the Medicare Law."

Motion carried.

"On page 29, paragraph 5, lines 47-50—Recommendation 12—the Committee recommends that it be approved with the additional recommendation that Resolution 69-8 (Orange County's Definition of Podiatry) be considered at the next House of Delegates after the fact finding committee's report is available."

Motion carried.

"The Reference Committee recommends that the report of the Council on Allied Professions and Vocations be adopted as amended."

Motion carried.

Council on Allied Professions and Vocations

JAMES W. WALKER, *Chairman*

The Council met once during the year, October 12, 1969. Most of the committees have been active during the year. Many items which have been referred to this Council are still under study. The Council has worked closely with the emerging Florida Health Manpower Council and guided its formation. The Council also considered the structure of its component committees and has made recommendations as to their size.

Committee on Dietetics—The Committee is working with the Florida Dietetic Association to develop a dietetic manual for use in all hospitals, whether large or small, and adaptable to nursing homes.

Committee on Law—The Committee has addressed itself to : (a) matters concerning nonresident, nonspecialist physicians testifying in malpractice cases in Florida; (b) resolution 69-1 (definite fee arrangements for attorneys); (c) unwarranted liability claims, and (d) interprofessional code.

Committee on Medical Technologists—The Chairman of this Committee has been working with some 10 state and national organizations to establish "a medical laboratory continuing education program" as a nonprofit corporation.

Committee on Nursing—This Committee, along with the Florida Nurses Association, sponsored a Second Florida State Physician-Nurse Conference on October 31-November 1, 1969, to consider "Changing Roles and Goals of Physicians and Nurses for Total Patient Care." Approximately 40 physicians and 47 nurses attended.

Committee on Opticians—The Committee has concerned itself with litigation by Florida optometrists against opticians concerning contact lens dispensing. The Com-

mittee supports the ophthalmologists in their efforts to assist the opticians and feels that dispensing of contact lenses by a qualified optician on the prescription of a physician is an integral part of the practice of medicine.

Committee on Physical Therapy and Rehabilitation —The Committee met with the Florida chapter of the American Physical Therapy Association and discussed problems of mutual concern. These items include services rendered by therapists on a doctor's prescription under Medicare, continuing education, and licensure of certification by the Board of Medical Examiners. The Committee also considered music therapy as a recognized means of rehabilitative therapy.

Committee on Podiatry—The Committee is conducting a comprehensive study of the science of podiatry as a whole with particular emphasis on its practice in Florida.

Committee on Radiologic and Nuclear Medicine Technologists—The Committee has under study the licensure or certification of x-ray technicians by the Medical Examining Board.

Committee on Religion—The Committee considered its membership and function. Problems concerning the harmonious cooperation of physicians and clergy for the good of the patient were considered.

Committee on Veterinary Medicine—The Committee has worked with the veterinary society to develop a system whereby colleagues in veterinary medicine may be apprised of pertinent meetings in human medicine of scientific and/or regional interest.

RECOMMENDATIONS

1. Approval of the participation of the FMA in the Florida Health Manpower Council.
2. That the Health Careers Chart be discontinued, as this is a function of the new Florida Health Manpower Council.
3. That the FMA approve FLAMPAC's considering participation by the allied health professions.
4. That a joint committee consisting of the Executive Committee of the Florida Medical Association and a similar committee of The Florida Bar meet to discuss those problems of mutual concern. (Steps have been taken to implement this request.)
5. That the FMA endorse, in principle, the establishment of programs of continuing education for all persons engaged in allied health fields.
6. That the fitting of contact lenses by a qualified optician under complete responsibility and control of the ophthalmologists is an integral part of the practice of medicine, regardless of the geographic location of the optician's office.
7. That the final approval of certification of qualified opticians to dispense contact lenses and suspension of previously granted certification shall be by the proposed board of examiners consisting of ophthalmologists as now pending in the Florida legislature.
8. Approve an interpretation of the physical therapy law to the effect that a prescription for physical therapy treatment must be written and the following procedures be essential in filling such a prescription. 1) That when an oral prescription is given over the telephone by a physician to the physical therapist, it must be followed by a written prescription within a reasonable period of time. 2) That there should be a time period to limit treatment with no blanket prescription. Guidelines should be established to determine the time period of treatment depending on disease and mode of treatment. 3) All therapy on a physician's prescription, given outside of a physician's office, should be done or supervised by a physical therapist and no billing should be initiated on work which is not done or supervised by a physical therapist. 4) A utilization review committee composed of registered physical therapists should be established for the purpose of reviewing therapy given by physical therapists under the Medicare Law.
9. That FMA sponsor development of interdisciplinary seminars for allied health professions and acknowledges the application by a nonprofit organization for a regional medical program grant to establish a continuing education program for physical therapy, occupational therapy, speech pathology and others that may be included later.
10. That FMA consider recognition of music therapy as a therapeutic means of rehabilitative therapy and further that a seminar or symposium on all related fields of rehabilitative therapy be considered to be held at a future FMA annual meeting.
11. That FMA support the physical therapists in opposing any change or restriction on physical therapy treatments un-



Reference Committee II personnel were Drs. James L. Borland Jr., Miles J. Bielek, John C. Fletcher, Thomas B. Thames (Chairman), Jere W. Annis, AMA delegate and Dewitt C. Daughtry. Miss Sandy Stanley was recording secretary.

der Medicare which would limit treatments based on years of experience of the physical therapist or date of licensure; and further, that FMA endorse acceptance of all qualified registered physical therapists in providing physical therapy under Medicare without restrictions as to years of experience from date of licensure.

12. Defer consideration of Resolution 69-8 (Orange County's Definition of Podiatry) until such time as the attitude and intentions of the Florida Podiatry Association are clearly determined; and that Resolution 69-8 (Orange County's Definition of Podiatry) be considered at the next House of Delegates after the fact finding committee's report is available.

Council on Medical Services

"The Reference Committee considered the report of the Council on Medical Services and recommends the following amendments:

"On page 34, paragraph 1, line 3—Recommendation 4—add the words '(To also include alcohol and tobacco),' so that the sentence will read:

"That the Association establish an Ad Hoc Committee on Drug Abuse (to also include alcohol and tobacco), the membership of which should contain representatives of appropriate medical specialties, law enforcement authorities, educators, the legal profession and the pharmaceutical industry."

Motion carried.

"On page 35, paragraph 5, line 24—Recommendation 14—delete the word 'changes' and substitute the words 'the change,' and on line 26 add the words 'as minimum standard,' so that the sentence will read:

"That the Association support the change in the state ambulance law proposed by the Division of Health which would require as minimum standard two persons to staff each ambulance, both of whom have completed standard and advanced first aid training."

Motion carried.

"On page 35, paragraph 8, line 45—Recommendation 17—delete the words 'closer and continuous' and substitute the word 'close' and delete the word 'established' and substitute the word 'continued' and on line 47, delete the words 'its medical' and on line 48, delete the words 'advisory committee' and substitute the words 'the FMA Medical Advisory Committee,' so that the sentence will read:

"That close communication be continued between the University of Florida's community health clinic project in Lafayette County and the FMA Medical Advisory Committee."

Motion carried.

"The Reference Committee also suggests frequent meetings be held between the FMA Medical Advisory Committee and the community health clinic physicians and that the responsibility for calling such meetings should rest with the chairman of the FMA Medical Advisory Committee."

Motion carried.

"The Reference Committee recommends that the report of the Council on Medical Services be adopted as amended."

Motion carried.

Supplemental Report
Committee on Blood

"The Reference Committee supports the report of the Committee on Blood in its recommendation that the State Board of Medical Examiners be granted statutory authority for licensure of plasmapheresis, since it is felt this constitutes the practice of medicine, and recommends that the report be adopted. It is also recommended that the FMA request that the legislature appropriate funds for the implementation of this program."

Motion carried.

Council on Medical Services

IRVING E. HALL JR., *Chairman*

The Council held one meeting during the past Association year, on February 1, 1970, in Orlando, for the purpose of reviewing the activities of its 13 committees, acting upon matters which had been referred to the Council, and adopting recommendations to be included in its 1969-70 annual report.

Recommendations concerning several matters which were referred during the year to the Council and/or various individual committees were made directly to the Board of Governors due to the time factor. These recommendations will appear in the Board's annual report rather than in that of the Council. Among these matters were actions pertaining to a State Commissioner of Health, a series of neonatality seminars, an Ohio State University nutrition project, encroachment by psychologists upon the practice of medicine, plans for a statewide conference on plasmapheresis, and resolutions on state agency responsibility for milk and food inspection and control of poisonous and hazardous substances.

On February 24, 1970, the Council held a special meeting in Orlando of the chairmen of its committees on Emergency Medical Services, Public Health and Rural Health to consider ways and means of improving emergency medical services in Florida, with particular attention to communications and transportation. Also participating in the meeting were representatives of the Division of Health, Department of Health and Rehabilitative Services, who reported upon implementation of the Division's $221,060 federal Department of Transportation Highway Safety Project Grant. It was agreed by all in

attendance that this problem should receive major emphasis by the Association and the appropriate state agencies concerned.

Most of the Council's committees functioned as such and were active in their areas of responsibility. They held or conducted more than 25 meetings during the year. As in recent years, the Committee on Labor was authorized an inactive status in the absence of pressing problems between organized labor and medicine. Although detailed individual reports were submitted by most of the committees which are available upon request, the following highlights of some of the committees' activities will serve as a brief summary of the Council's work during the year.

The Committee on Aging concerned itself with efforts to provide alternatives to long term hospitalization of aged patients in state mental hospitals and with the involvement of the medical profession in state planning for a 1971 White House Conference on Aging.

The Committee on Blood devoted major effort to developing needed controls over the practice of plasmapheresis in Florida. It distributed an information bulletin to county medical societies on this subject in May 1969 and, as directed by the 1969 House of Delegates, planned and conducted a statewide conference on plasmapheresis, held April 4, 1970, which should bring about necessary regulation in this field.

The Committee on Child Health met quarterly in its busy capacity as School Health Medical Advisory Committee to the Department of Education and Division of Health, Department of Health and Rehabilitative Services of Florida. It also served as Pediatric Advisory Committee to the Division of Health. A few of the committee's many activities included the presentation of a special program on health education for Florida's county school superintendents in January 1970, efforts to expand and improve health education programs in the state universities, review and updating of immunization policies and procedures, study and recommendations for Association action in the field of drug abuse, and initiation of a study to reduce athletic injuries through use of improved equipment.

The Committee on Emergency Medical Service planned and carried out, in cooperation with the Division of Health, two regional seminars for hospital emergency room personnel under a federal grant to the Florida Medical Foundation. Nearly 300 physicians, nurses and other emergency personnel from throughout the state attended these meetings, which were held in October 1969 in Orlando and Fort Lauderdale. Similar future seminars are planned. The Committee also continued to function as state medical advisory committee for the Selective Service System.

The Committee on Hearing continued to work toward full implementation by the Division of Health of hearing screening programs.

The Committee on Maternal Health continued its statewide maternal mortality survey, studied the practice of nurse-midwifery and made appropriate recommendations, and advised various groups concerning legislation permitting therapeutic abortion.

The Committee on Mental Health conducted its annual Conference of Key State Mental Health Leaders in February, 1970, which was attended by some 25 persons in policy-making positions in government and the professions. The Committee also studied and made recommendations for legislation in the areas of psychology, therapeutic abortion and community mental health centers.

The Committee on Mental Retardation developed a professional educational program on mental retardation which will be one of the scientific sections of the 1970 annual meeting.

The Committee on Occupational Health continued its efforts to encourage increased instruction in occupational health in medical school curricula and cooperated with other committees of the Association having responsibilities in the economic area of industrial medicine.

The Committee on Public Health considered and formulated recommendations upon a broad range of problems and subjects classified generally as public health matters. Among the topics were a proposal for a national conference on environmental health, plans for a state conference on communicable diseases, immunization policies and procedures, responsibility for food inspection and control of hazardous substances, toxic pesticides and their environmental effects, nutrition among low income families, the adequacy of nursing home inspection and improvements in the state ambulance law.

The Committee on Rural Health continued to represent the Association on the joint Florida Committee on Rural Health, an effective liaison mechanism between medicine and agriculture which has existed since 1956. The Committee concerned itself with the effects of pesticides in rural areas, ways and means to encourage more health professionals to locate in smaller towns, the improvement of ambulance and other emergency services in outlying areas, the quality and quantity of medical care available to elderly persons residing in remote retirement communities, and the operation of the University of Florida's health clinic at Mayo in Lafayette County.

The Committee on Vision developed and produced, in cooperation with the State Department of Education, a videotape describing current preschool and school vision screening procedures. In conjunction with the Division of Health, the Committee will sponsor a glaucoma exhibit at the Association's 1970 annual meeting.

The following consecutively numbered recommendations were adopted by the Council. To facilitate procurement of needed additional background information, the name of the originating committee or committees precedes each recommendation or series of recommendations.

RECOMMENDATIONS

(Committee on Aging)

1. That support be given efforts and pilot projects of the Division of Family Services and the Division of Mental Health, Department of Health and Rehabilitative Services, to establish community-based alternatives to long term mental hospital care for elderly patients not requiring such care.
2. That the activities of the Florida Council on Aging be supported by the Florida Medical Association and that the Association actively demonstrate its interest in health problems of the aged in preparation for the 1971 White House Conference on Aging.

(Committee on Blood)

3. That the Association provide all possible support for legislation which would bring about adequate controls and safeguards over the conduct of plasmapheresis in Florida. (Referred to Board of Governors by Ref. Comm. IV)

(Committee on Child Health)

4. That the Association establish an Ad Hoc Committee on Drug Abuse (to also include alcohol and tobacco), the membership of which should contain representatives of appropriate medical specialties, law enforcement authorities, educators, the legal profession and the pharmaceutical industry.

(Committees on Child Health and Public Health)

5. That compulsory immunization of children as a prerequisite for admission to day care centers or schools be endorsed

and that required immunizations be determined by the Division of Health, Department of Health and Rehabilitative Services and modified from time to time as appropriate.

(Committee on Maternal Health)

6. That provision for a yes or no answer to the statement "Pregnant or pregnancy terminated in the last 90 days" be added to the Florida death certificate as requested by the House of Delegates in 1968 and still not implemented by the Division of Health despite issuance of a new death certificate in 1970.
7. That in order to establish and clarify the profession of nurse-midwife in those counties where it is necessary for the adequate care of pregnant women, the Association urge the addition of a definition of nurse-midwifery to Chapter 485, Florida Statutes, and/or to the Division of Health rules and regulations thereto, and that the Division of Health be requested to submit a proposed scope of practice and related rules and regulations subject to further consideration and approval by the Committee on Maternal Health.

(Committees on Maternal Health and Mental Health)

8. The Florida Medical Association believes that the liberalization of the abortion law in the State of Florida should be passed; however, it is believed that the North Carolina type law is preferable to the Hawaii type law. With this in mind, the following recommendations are made:

1. An abortion may be performed to protect the life or the health of the mother, health of the mother to include physical or mental health.

2. An abortion should be allowed when there is a reasonable medical certainty that the pregnancy would result in a defective child.

3. Abortion should be allowed following rape, statutory or forceful, and incest.

4. Consideration should be given to establishing a residency requirement of three months.

This recommendation by the FMA is further made because of recent court decisions in the United States which would indicate that our present law allowing abortion only to save the life of the mother may soon be declared unconstitutional and this would result in no abortion law for the State of Florida. It is believed that guidelines for abortion by physicians on legal grounds should be definite. (Amended by Ref. Comm. IV).

(Committee on Mental Health)

9. That the Association support a Community Mental Health Center and/or Clinic Act, if introduced, provided it includes (a) a base minimum of statutory state participation of no less than 50 per cent of the cost of reimbursable expenses for patient care and (b) principles for continuity of patient care. (Approved by Ref. Comm. IV)
10. That, in view of a proliferation of health disciplines and splintered licensure, certification and registration laws regulating them, the Association undertake a careful, indepth study of state regulation of professions and vocations delivering health care, with the objective of developing long range policy and legislation in the public interest.

(Committee on Public Health)

11. That tentative plans by the American Medical Association for a national conference on environmental and public health be supported.
12. That endorsement be given to a nutrition surveillance study to be conducted among low income families in Florida by the Division of Health.
13. That more adequate inspection of nursing homes be brought about through increased funding of Division of Health programs in this area.

(Committees on Public Health, Emergency Medical Service and Rural Health)

14. That the Association support the change in the state ambulance law proposed by the Division of Health which would require as minimum standard two persons to staff each ambulance, both of whom have completed standard and advanced first aid training.

(Committees on Public Health and Rural Health)

15. That the Association (a) express concern over the increasing problem of toxic pesticides in the environment, (b) recognize the need for controls upon indiscriminate and unsafe use of pesticides, (c) support further scientific study in this field, and (d) not support legislative measures immediately banning such agents. (Amended by Ref. Comm. IV)

(Committee on Rural Health)

16. That efforts be made to improve the quality and quantity of health care in rural areas by encouraging more physicians and other health professionals to locate in such areas.
17. That close communication be continued between the University of Florida's community health clinic project in Lafayette County and the FMA Medical Advisory Committee.

(Committees on Rural Health and Emergency Medical Service)

18. That the Association study the problem of ambulance and other emergency transportation services in rural areas throughout Florida with the goal of making recommendations to improve such services.

Supplemental Report Committee On Blood

As directed by the 1969 House of Delegates, a Statewide Conference on Plasmapheresis was planned and held under Association sponsorship in cooperation with the Florida Association of Blood Banks, Florida Division of Health and Florida Board of Medical Examiners. Held April 4, 1970, in Jacksonville, the conference attracted a registration of nearly 100 persons representing medical societies, blood banks, public health departments, plasmapheresis centers and professional and public news media. Subjects presented by carefully selected speakers included "The Medical Aspects of Plasmapheresis," "The Role of the Federal Government in Plasmapheresis Supervision," "The Role of Blood Banks," "The Role and Experience of State Government in Plasmapheresis Regulation," "Plasmapheresis and the Florida Medical Practice Act," "Informed Consent and its Application to Plasmapheresis" and "National Research Council Guidelines."

From information presented at the conference and subsequent discussions, it became obvious that there is a definite need for state regulation in this field. It was agreed by all individuals concerned that plasmapheresis is the practice of medicine and that protection of donors is of extreme importance. It was noted that the Division of Health presently has legal authority to regulate only the laboratory aspects of plasmapheresis centers which does not include the medical practice component. It was unclear whether or not the State Board of Medical Examiners has statutory authority and if so, the capacity and willingness to undertake effective regulatory activities in this area. It is the opinion of the Committee on Blood, however, that the agency which administers and enforces the Medical Practice Act should be the one to regulate all aspects of the practice of medicine.

In view of the apparent hiatus of state agency authority and responsibility and agreement that the practice of plasmapheresis constitutes the practice of medicine, it was decided that this important question should be placed before the House of Delegates for full consideration and appropriate action in the interest of the citizens and medical profession of Florida.

Council on Voluntary Health Agencies

"The Reference Committee considered the report of the Council on Voluntary Health Agencies and recommended that it be approved as printed in the Handbook."

Motion carried.

Council on Voluntary Health Agencies

FRANK L. CREEL, M.D., *Chairman*

Official meetings of the Council were held October 18, 1969, and February 14, 1970. The October meeting was devoted to planning and implementation of Council activities. In February the Council held a joint conference with executive directors of recognized Florida voluntary agencies. A future joint meeting is scheduled for the fall of 1970.

The Council remained quite active during the year, concerning itself with a variety of subjects related to its basic purpose of maintaining close liaison with voluntary health agencies, and assuring adequate medical participation in their programs, in the public interest.

A brief summary of the Council's 1969-70 activities is presented by general subject area.

Recognition Program—As is the annual custom, programs of the eleven statewide voluntary health agencies officially recognized by the FMA were carefully reviewed and reevaluated, with emphasis on the medical aspects. No reasons were found for recommending withdrawal of recognition for any of the eleven, however, one which furnished inadequate information relative to their recognition, is still on probation. The application of the Leukemia Society of America, Inc., has received considerable study. A lengthy conference was held with national and state representatives of the Leukemia Society at the time of the February 1970 joint meeting of the Council with recognized agencies. It was decided to reconsider their request for recognition in one year. The following organizations currently are recognized:

Florida Chapter, Arthritis Foundation
Florida Society for the Prevention of Blindness
Florida Division, American Cancer Society
United Cerebral Palsy of Florida
Florida Society for Crippled Children and Adults
Florida Heart Association
Florida Association for Mental Health
National Multiple Sclerosis Society
The National Foundation
Florida Association for Retarded Children
Florida Tuberculosis and Respiratory Disease Association

Liaison with Agency Executive Directors—At the annual joint conference with executive directors of recognized agencies, February 1970, many subjects were discussed. Particular emphasis was placed on recent activities of the Florida Voluntary Health Association and the continuing professional education programs of the voluntary agencies, changes in financing, staff, and physician representation on local voluntary health agency boards. There was much discussion regarding percentage of income spent in fund raising.

Florida Voluntary Health Association—The Council has maintained close liaison with the Florida Voluntary Health Association, a joint state coordinating body whose membership is composed of voluntary health association executive directors. This group includes in its activities: legislative action, preparation of a directory of Florida health services and organizations, sponsorship of educational programs (including the annual Institute for Voluntary Health Agencies in which this Council participates), and encouragement in developing coordinating groups of executive directors of voluntary health agencies at the local level.

County Medical Society Programs—In an address delivered to the delegates at the 1970 Conference of County Medical Society Presidents and Secretaries, the chairman delineated the scope and functions of the Florida Medical Association Council on Voluntary Health Agencies, and appealed for developing more meaningful local medical society councils or liaison groups.

Charitable Solicitations Act—Despite the abolition of the Advisory Committee to the Charitable Solicitations Program, the Charitable Solicitations Program, maintained by the Secretary of State's office, is actively functioning. Close liaison is continuing between the Council and this Program.

AMA Programs—Close relations have continued between the American Medical Association Council on Voluntary Health Agencies and the FMA Council through the membership on the AMA Council of a past chairman of the FMA Council. At its February 1970 meeting, the Council received a report of recent AMA activities which noted that there will be increased emphasis on professional education programs of voluntary health agencies.

National Program for Voluntary Action—The Council has established informational liaison with President Nixon's National Program for Voluntary Action (NPVA), which is envisioned as a revitalization of the private, independent sector as a factor in solving many of America's problems.

Council on Specialty Medicine

(Recommendation Concerning Physical Therapy)

"The recommendation of the Council on Specialty Medicine concerning physical therapy was briefly discussed by the chairman of the Council on Specialty Medicine and the chairman of the Committee on Physical Therapy and Rehabilitation and there was now felt to be no action necessary on this recommendation. As this material had been covered in other reports of the Council on Allied Professions and Vocations, we recommend that it be deleted."

Motion carried.

(See Council on Specialty Medicine report, page 32).

Report of Board of Governors

PKU Testing

"The Reference Committee considered the Board of Governors report, PKU Testing, and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 47).

Action No. 21. Migrant Labor

"The Reference Committee considered the Board of Governors Action No. 21, Migrant Labor, and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 48).

Action No. 22. Health Manpower

"The Reference Committee considered the Board of Governors Action No. 22, Health Manpower and recommends that it be approved as printed in the Handbook."

Motion carried. (See Board of Governors report, page 48).

Resolution 70-5

Communications

Irving E. Hall, Delegate

"The Reference Committee considered Resolution 70-5, 'Communications,' and recommends that it be approved as printed in the Handbook."

Motion carried.

Resolution 70-5

Communications

Whereas, With the very rapid and far-reaching development of communications, data retrieval and transport, it has become obvious that utilization of these electronic devices can greatly improve the delivery of medical care; and

Whereas, The improvement of the delivery of medical care is the primary aim of organized medicine; therefore be it

RESOLVED, That the Florida Medical Association investigate and pursue the necessary management developments for utilization of appropriate electronics and communications equipment. This includes development of necessary state and national legislation, channel dedication, specification determination, establishment and maintenance of high standards for equipment and procedure and production of related educational systems for development and use. Be it further

RESOLVED, That the leadership potential of the FMA be applied vigorously to dissemination of information and promotion of the use of these devices by all its members and related health facilities.

Resolution 70-6

Cooperative Efforts of Medical Societies and School Boards on Problems of Education of the Pregnant Child

Duval County Medical Society

"The Reference Committee considered Resolution 70-6, 'Cooperative Efforts of Medical Societies and School Boards on Problems of Education of the Pregnant Child,' and recommends adoption with the following amendment:

In paragraph 10, line 39—Resolved—add a comma after the word 'delivery' and delete the word 'any' and substitute the word 'A' and on line 40 delete the words 'solve her' and substitute the words 'serve their,' so that the sentence will read:

"County school systems permit children who have been pregnant to continue education after delivery, in a branch of the system that will best serve their needs."

Motion carried to adopt Resolution 70-6 as amended.

Resolution 70-6

Cooperative Efforts of Medical Societies and School Boards on Problems of Education of the Pregnant Child

Whereas, The medical community of Jacksonville and the state of Florida are called upon to care for and counsel the pregnant children of this state, and

Whereas, In Florida 14% of babies are born to mothers of school age, and

Whereas, This number in 1969 represented 14,382 children, and

Whereas, Most school policies in Florida now dismiss the pregnant child from school and in some cases will not allow her to return, and

Whereas, Other schools enroll the child in adult educational programs unable to cope with the child's needs causing most pregnant children to withdraw from any formal education, and

Whereas, The problem is compounded by throwing undereducated, unemployable children into the labor market or onto the resources of community and family care, and

Whereas, Many of these children are indigent at the time of their pregnancy and face a life time of spiraling defeat and habitual poverty since there are practically no employment opportunities for the pregnant child, be it therefore

RESOLVED, The Florida Medical Association deplores the waste of talent and abilities and encouragement of dependency resulting from poor education among pregnant girls and recommends to the Florida legislature, the Governor and the State Superintendent of Schools:

(1) The public school authorities, public health and public welfare authorities serving each county will jointly establish and operate schools for continuing education of pregnant girls. That these schools will provide some measure of physical and health education in addition to academic and technical skills, in recognition of the fact that many of these children have no concerned adult attention.

(2) County school systems permit children who have been pregnant to continue education after delivery in a branch of the system that will best serve their needs.

Resolution 70-26

Production of Television Programs for Enlightenment of the General Public as to the Physician's Role in Medicine and as an Individual Person

M. Bart Knight Jr., Delegate

"The Reference Committee considered Resolution 70-26, 'Production of Television Programs for Enlightenment of the General Public as to the Physician's Role in Medicine and as an Individual Person,' and recommends adoption with the following amendment:

"In paragraph 5, line 42—Resolved—delete the words 'alone or.' On line 43, delete the word 'and' which appears after the word 'Association' and on line 44, delete the words 'or other medical societies or associations,' so that the sentence will read:

"RESOLVED, That the Florida Medical Association in conjunction and cooperation with the American Medical Association, sponsor the production of one or more television programs to show the physician's efforts to provide good medical care in the United States and the obstacles he meets in his efforts to provide this care."

Motion carried to adopt Resolution 70-26 as amended.

Resolution 70-26

Production of Television Programs for Enlightenment of the General Public as to the Physician's Role in Medicine and as an Individual Person

Whereas, Recent CBS news specials and other programs and printed material in recent months and years have been extremely degrading and derogatory toward the physician and his role in medical care in the United States of America, and neglectful in presenting his role as citizen and independent individual, and

Whereas, These efforts to degrade the physician by the news media and government agencies are continuing and increasing in an effort to sway public opinion to a degree that it will be possible to bring medical care in the United States under governmental control, and

Whereas, Public sentiment and feelings toward medical doctors have in the past been created and molded by each individual's own family or personal physician, and

Whereas, With increased scientific technology the individual patient may now be exposed to many doctors under a less personal type of relationship, patients in general are more susceptible to derogatory propaganda being used by many in the form of mass media such as television, we feel that it would be beneficial for medicine and physicians to answer some of the charges made against them; and to explain the situation and role of the physician in medical care, and feel that it can best be done through mass media such as television, thereby reaching more people with less time and effort demanded on the individual physician to explain these situations to individual patients, be it therefore

RESOLVED, That the Florida Medical Association, in conjunction and cooperation with the American Medical Association, sponsor the production of one or more television programs to show the physician's efforts to provide good medical care in the United States and the obstacles he meets in his efforts to provide this care.

Resolution 70-29

Participation by County Medical Societies in Health Care Systems

James W. Walker, Delegate

"The Reference Committee considered Resolution 70-29, 'Participation by County Medical Societies in Health Care Systems' and recommends adoption with the following amendments:

"In paragraph 2, line 18, that the spelling of the word 'original' be corrected.

"In paragraph 3, line 22, that the word 'physical' be deleted and the word 'fiscal' be substituted, so that the sentence will read:

"Whereas, Some county medical societies and their foundations have served as the fiscal intermediaries in various health programs, and"

Motion carried.

"In paragraph 5, line 28—Resolved—delete the word 'approves' and substitute the word 'approve.' On line 31, add the words 'to the public' after the word 'care.' On line 32, delete the

words 'responsible,' 'to the public' and 'provided,' and on lines 33-35, delete the words 'such systems of health care delivery do not result in the direct competition of the society with the practicing physicians of that community,' so that the sentence will read:

"RESOLVED, That the Florida Medical Association approve in principle the participation of county medical societies or their foundations in developing and participating in these new programs of health care delivery which will tend to deliver quality medical care to the public, under the supervision of physicians."

Motion carried.

Motion carried to adopt Resolution 70-29 as amended.

Resolution 70-29

Participation by County Medical Societies in Health Care Systems

Whereas, New methods of delivery of health care are being devised and recommended for implementation, and

Whereas, Some county medical societies have under consideration new and original plans for the delivery of health care to their citizens, and

Whereas, Some county medical societies and their foundations have served as the fiscal intermediaries in various health programs, and

Whereas, County medical societies have no clearly defined guidelines concerning the adoption or implementation of these new programs, therefore be it

RESOLVED, That the Florida Medical Association approve in principle the participation of county medical societies or their foundations in developing and participating in these new programs of health care delivery which will tend to deliver quality medical care to the public, under the supervision of physicians.

Resolution 70-32

Prisoners of War in North Viet Nam Clay County Medical Society

"The Reference Committee considered Resolution 70-32, "Prisoners of War in Viet Nam," included in the Delegates' Packet, and recommends adoption with the following amendment:

"In paragraph 5, line 29—Resolved—delete the words 'and the' and substitute the words 'to approve,' and on line 30, delete the words 'American Medical Association forward approval of these statements' and substitute the words 'these statements and forward them to the American Medical Association', so that the sentence will read:

"RESOLVED, That (a) the Clay County Medical Society condemns the action of the government of North Viet Nam, that (b) the Clay County Medical Society, as a professional medical organization, recommends that for the best medical interest of both servicemen and their families, that (1) a list of prisoners' names should be furnished, that (2) inspection of prisoner compounds by neutrals should be carried out, and that (3) medical supplies and food parcels, as well as mail should be distributed to prisoners, and that (c) the [Clay County Medical Society further urges the Florida Medical Association to approve these statements and forward them to the American Medical Association]."

Dr. Samuel Day, Past President: "I rise to a point of order. I move the amendment that the words 'Clay County Medical Society' be stricken wherever they appear, and that 'Florida Medical Association' be substituted; and that the last item (c) be deleted, and replaced with the following: 'the Florida Medical Association urges the American Medical Association to do all within its power to secure implementation of these recommendations'."

The subsitute amendment was seconded and carried.

Motion carried to adopt Resolution 70-32 as amended.

Resolution 70-32

Prisoners of War in North Viet Nam

Whereas, That since in excess of 1,350 American servicemen are presumed to be prisoners of war in North Viet Nam, and

Whereas, That since North Viet Nam has failed to meet her agreement to the Geneva Convention in regard to these prisoners, and in particular

Whereas, That the families of these men have been denied communications by reasonable channels or by the release of prisoners' names, and

Whereas, That this has caused undue anguish to the servicemen and their families, therefore be it

RESOLVED, That (a) the Florida Medical Association condemns the action of the government of North Viet Nam, that (b) the Florida Medical Association, as a professional medical organization, recommends that for the best medical interest of both servicemen and their families, that (1) a list of prisoners' names should be furnished, that (2) inspection of prisoner compounds by neutrals should be carried out, and that (3) medical supplies and food parcels, as well as mail should be distributed to prisoners, and that (c) the Florida Medical Association urges the American Medical Association to do all within its power to secure implementation of these recommendations.

Dr. Thames: "The chairman wishes to express his appreciation to all of the members who appeared before our committee and to the members of the committee who worked so diligently, including our secretary, Miss Sandy Stanley.

"Mr. Speaker, this concludes the report of Reference Committee No. II."

Report of Reference Committee No. III
Finance and Administration

Dr. Richard C. Clay, Chairman, came forward to give the report of the Reference Committee No. III on Finance and Administration.

Dr. Clay: "Mr. Speaker, Mr. President, and members of the House of Delegates: Your Reference Committee on Finance and Administration has considered each of the items referred to it, and desires to present the following report. The reference committee's recommendations on each item will be submitted separately, and I respectfully suggest that each item be acted upon before going to the next."

Report of the Board of Governors

(Resolution 70-19, FMA Delegates) (Resolution 70-22, Membership of the House of Delegates)

"The reference committee considered the report of the Board of Governors.

"Under the amendments to the By-Laws, the recommendation of the Board of Governors beginning at the top of page 49 (items b and c) concerning determination of delegates, was considered along with Resolutions 70-19 and 70-22, as these all deal with determination of the membership of the House of Delegates.

"The reference committee recommends that beginning on line 15 on page 49, the paragraph be amended to read as follows:

> "The House of Delegates shall be limited as nearly as possible to a maximum of 250 regularly elected members from county medical societies. The Board of Governors shall automatically determine the ratio of delegates to active members to accomplish this limit of the membership of the House. In addition to the delegates from the county medical societies, the members of the Council on Specialty Medicine, the officers and the members of the Board of Governors shall be members of the House of Delegates."

Then, beginning on line 30, item 1, we recommend this portion be amended to read:

> "The privilege of the floor shall be restricted to seated delegates, AMA Delegates, Past Presidents, and AMA Past Presidents who are FMA members, except by permission of the presiding officer."

The adoption of these amendments would necessitate the deletion from the By-Laws of the second paragraph of Section 6 under Chapter IV, where the *current* automatic delegates are listed; the reference committee therefore recommends that this amendment also be adopted.

Mr. Speaker, I move that these amendments be adopted.

Dr. Franklin Evans, Dade: "Mr. Speaker, I regret to say that I believe this recommendation is out of order, based on the Charter and By-Laws of the Florida Medical Association. Chapter XIV, Amendments, Section 1, reads: 'By-Laws Amended. These By-Laws may be amended by first being considered by the Board of Governors. The report of the Board of Governors shall be submitted to the House of Delegates and the appropriate Reference Committee. After the report of the Reference Committee, it shall require



Reference Committee III personnel were Drs. Abbott Y. Wilcox, James C. Pringle Jr., Richard C. Clay (Chairman), Richard G. Connar, Truett H. Frazier and Francis T. Holland, AMA delegate (not shown). Mrs. Wanda Bain was recording secretary.

a majority vote of the delegates seated to pass the amendment.' What this means is, a change in the By-Laws must first be considered by the Board of Governors and a recommendation must be made to the FMA House of Delegates. Then the House can act upon it. This has not been done, and therefore this really can not be considered."

Dr. Donegan pointed out that a change in the By-Laws was recommended in the Handbook and should have come to the delegates' attention, and that although the Reference Committee's recommendations are different, it is on the same subject. "Theoretically, if the Board of Governors never recommended a change in the House of Delegates, the House could never be changed."

Dr. Evans: "The recommendation should go to the Board of Governors; then, if the Board turned a proposal down, the House could overrule the Board."

The Speaker asked for the desires of the House.

Dr. Day moved that the recommendation be referred to the Board of Governors. The motion was seconded but failed to carry.

Dr. Clay: "The Board of Governors made recommendations to us for amendments to the By-Laws, most of which are totally acceptable. If Dr. Evans' thinking is to be followed, the Reference Committee would have only one purpose—to rubber stamp the recommendation of the Board of Governors, or send it back, which I do not think is the intent of our organization.

"The Board has taken cognizance of the fact that the House is continuing to grow, and made an effort to keep the House at a size comparable to what we have here today. There are 56 standing, fixed members as presently constituted. As this number grows, the ratio of these to elected delegates will continue to increase. For this reason, we are hopeful that proper proportion will be retained by the recommendation we have made, which we think is better than that submitted by the Board of Governors."

Dr. Luis Perez, Seminole: "Being a representative of a very small county, I think this will dilute our voting privileges in the House. Before any determination is made, I believe we should consider Resolution 70-22, Membership of the House of Delegates, presented by the Alachua County Medical Society, and judge which will be best for the Association. If we vote on this recommendation now, it will destroy that resolution."

A division of the House was required for the vote on the recommendation of the Reference Committee.

Motion carried.

Dr. Clay: "Mr. Speaker, the reference committee recommends that the portions of the Board of Governors report which were referred to Reference Committee No. III be approved as amended."

Motion carried.

Report of the Board of Governors

HENRY J. BABERS JR., *Chairman*

The Board of Governors held five meetings during the Association's administrative year. These were held on May 18 and October 2-4, 1969, and January 18, January 30 and March 22, 1970. The Executive Committee of the Board held more frequent meetings during the year.

This has been a most active and demanding year for the Association upon its leadership, and your chairman wishes to express his deep appreciation to each officer, member of the Board of Governors, council and committee chairmen and individuals who have performed in an outstanding manner during the past year. To be associated with so many outstanding physicians has been one of the greatest compensations of being president of our Association.

MAJOR ACTIVITIES

Annual Meeting.— The Board of Governors approved the format for the 1970 annual meeting and the scientific program as submitted by the Committee on Scientific Assemblies, which again this year is being sponsored in cooperation with various specialty groups. The 1969 annual meeting was carefully reviewed and an attempt has been made to improve the format in every way possible. The major change is the addition of a third meeting of our House of Delegates, so the business of our Association may be more properly conducted.

Presidents' and Secretaries' Conference.—The Twelfth Annual Conference of Presidents and Secretaries of County Medical Societies was held in January 1970 in Orlando. Again this year the purpose of the Conference was to orient the officers of the county medical societies regarding the major programs and activities of the Association, to better facilitate their programming and implementation at the county level. The Conference was enthusiastically received by the county medical society representatives, and was followed by a Seminar on State Legislation which covered in detail the specific legislative programs and problems of medicine which are being considered by the Florida Legislature.

Financial Statement and Budget.— The Board reviewed the financial statement prepared by the Secretary-Treasurer and the Executive Vice President, and approved the auditor's statement prepared by Lucas, Herndon, Harms and Hyers, Certified Public Accountants, for the Association's fiscal year which was the calendar year 1969. The Association had an income from all sources of $403,603; expenses incurred were $397,423, for a gross excess of income over expenses of $6,180, which did not include funds expended for equipment and interest paid as these were picked up under fixed assets of the Association. Advance dues were received during the year of approximately $20,000 more than in previous years. The net result for 1969 was the Association going into the red approximately $25,000. This was anticipated by your Board. Several items last year which were unbudgeted had to come from the Association's reserves.

The Board approved an annual budget for the calendar year 1970 of $505,000. In compliance with the By-Laws, this budget was prepared by the Executive Vice President after consultation with the Secretary-Treasurer, reviewed by the Executive Committee and approved by the Board of Governors. It was based upon an anticipated income of $505,000. This budget included every item which your officers presented to the House of Delegates last year when requesting a dues increase.

Copies of the CPA audit are available to the appropriate Reference Committee and are on file in the Association's office and available for review by members of the Association.

Appointments—The Board of Governors appointed Robert E. Zellner, M.D., as the AMA Delegate to serve on the Board of Governors; Eugene G. Peek Jr., M.D., as the State Board of Health representative on the Board of Governors; and approved the appointment of William M. C. Wilhoit, M.D., as the optional member of the Executive Committee and W. Dean Steward, M.D., as Public Relations Officer. Franz H. Stewart, M.D., was appointed as Editor of the Journal; Oscar W. Freeman, M.D., and Clyde M. Collins, M.D., were appointed as Assistant Editors. William M. Straight, M.D., was appointed Medical History Editor, and Richard M. Fleming, M.D., was appointed as Assistant Editor from the Board of Governors.

The Board re-appointed the Committee on Research, with Donald W. Smith, M.D., as chairman; re-appointed the Subcommittee on Inter-American Relations, Quackery, Venomous Snake Bite, and the Investment Plan Committee.

The Board of Governors appointed four ad hoc committees: Committee on Peer Medical Utilization Review, James B. Byrne, M.D., Chairman; Committee on Computerization in Medicine, Vernon B. Astler, M.D., Chairman; Committee on Professional Liability Insurance, Robert J. Brennan, M.D., Chairman; and Committee on Government Programs, George H. Evans, M.D., Chairman. Recommendations are being presented elsewhere to make these standing committees under the appropriate councils within the Association's structure.

The Board appointed the Committee on National Legislation and Key Contact Physicians for 1970, as well as a Medical Advisory Committee to the Lafayette County Health Project, designating the chairman of the Association's Committee on Rural Health to serve as an advisory member of this committee.

The Board of Governors re-appointed the ad hoc special Committee on Allied Health Personnel with James W. Walker, M.D., Chairman, and the ad hoc Committee on Workmen's Compensation, Joseph G. Matthews, M.D., Chairman. The Board designated Jack Q. Cleveland, M.D., to serve as the Board's representative on the FLAMPAC Board of Directors, and designated the Council on Specialty Medicine as advisory to the Committee on State Legislation when specialty legislation is being considered. The duties of the Subcommittee on Individual Responsibility Program were transferred to the Council on Medical Economics for assignment to the appropriate committee.

RECOGNITION

The Board reviewed nominations received from county medical societies and selected the recipient of the A. H. Robins Company Award "For Outstanding Community Service by a Physician" to be presented at the First Meeting of the House of Delegates, May 6, 1970. Award nomination will be included in the Delegates' Packets.

The Board of Governors extended sincere appreciation to Franz H. Stewart, M.D., who has served in an outstanding manner as Editor of the Journal of the Florida Medical Association.

NOMINATIONS

The Board of Governors' nominations for the recipients of the Certificate of Merit and the Certificate of Appreciation will be included in the Delegates' Packets for presentation at the First Meeting of the House of Delegates.

Committee on Membership and Discipline.—As provided in the By-Laws, the Board of Governors nominates the following physicians for terms expiring in 1970:

District 1—James T. Cook, Marianna (1972)
William W. Thompson, Fort Walton Beach (1974)
District 2—Charles E. Barrineau, Palatka (1971)
Louis G. Landrum, Lake City (1973)
J. Maxey Dell Jr., Gainesville (1974)
District 3—John A. Rush Jr., Jacksonville (1972)
Leslie R. Adams, Jacksonville (1973)
Samuel J. Alford Jr., Jacksonville (1974)
District 4—Carroll M. Crouch, Daytona Beach (1971)
William W. O'Connell, St. Augustine (1973)
Edwin H. Updike II, Ocala (1974)
District 5—Truett H. Frazier, Orlando (1972)
Theodore J. Kaminski, Melbourne (1974)
District 6—Linus W. Hewit, Tampa (1971)
James M. Ingram, Tampa (1974)
District 7—John M. Butcher, Sarasota (1972)
Woods A. Howard, Lakeland (1973)
H. Quillian Jones Sr., Fort Myers (1974)



Members of the Board of Governors (standing from left) Drs. William J. Dean, Charles K. Donegan, James F. Cooney, Eugene G. Peek Jr., William M. C. Wilhoit, Jack Q. Cleveland and Richard M. Fleming. (Seated from left) Drs. James W. Walker, Richard C. Dever, Floyd K. Hurt, James T. Cook, Henry J. Babers Jr., Francis T. Holland and Joseph G. Matthews.

District 8—John P. Ferrell, St. Petersburg (1971)
Richard Reeser Jr., St. Petersburg (1974)
District 9—Martin G. Gould, Fort Pierce (1972)
John S. Stewart, Naples (1973)
Charles M. Harris Jr., West Palm Beach (1974)
District 10—Russell B. Carson, Fort Lauderdale (1972)
Henry D. Perry, Hollywood (1974)
District 11—Harold Rand, Miami (1971)
Richard C. Dever, Miami (1973)
Vincent P. Corso, Miami (1974)
District 12—J. Lee Dockery, Miami (1971)
Richard M. Fleming, Miami Beach (1974)

Blue Shield Board of Directors.—The Board of Governors reviewed the nominations for the Blue Shield Board of Directors presented by the Blue Shield Nominating Committee and from those nominations for each physician directorship the following were chosen:

Medical District B:	Thomas E. McKell, M.D., Tampa M. Brittain Moore, M.D., Lakeland
Medical District D:	Scheffel H. Wright, M.D., Miami Richard C. Clay, M.D., Miami
At Large:	E. R. Dunsford Jr., M.D., Jacksonville Charles K. Donegan, M.D., St. Petersburg
At Large:	Warren W. Quillian, M.D., Coral Gables Samuel M. Day, M.D., Jacksonville
At Large:	Joseph C. Von Thron, M.D., Cocoa Beach Joseph P. Hendrix, M.D., Port St. Joe

The lay members nominated by the Nominating Committee were approved by the Board, as follows:

Medical District D:	Allen Morris, Miami
At Large:	Dean C. Houk, St. Petersburg
At Large:	Arthur W. Saarinen, Fort Lauderdale
Blue Cross Board Member:	Michael J. Wood, Jacksonville

State Agencies.—Your Association made numerous recommendations to the Governor and to other agencies for appointments of physicians to serve on various Boards or advisory committees.

REFERRALS BY HOUSE OF DELEGATES

The Board of Governors reviewed the entire Proceedings of the 1969 House of Delegates and referred every item needing study or action to appropriate councils and committees of the Association, and implemented the policy itself where appropriate. The individual actions regarding the policies of the House of Delegates appear in the various council reports as well as in this report.

PKU Testing.—The Executive Committee and the Board of Governors reviewed the recommendation of the Council on Medical Services concerning PKU Testing which was referred to the Board of Governors by the 1969 House of Delegates. This recommendation was amended and approved as follows: "That the state legislature be urged to provide adequate funding for the Division of Health's program of case-finding and laboratory services for patients with phenylketonuria (PKU) and other metabolic disorders, and that the policy be established that the Division of Health serve as the reference laboratory for the state, with diagnostic centers at appropriate locations." (Approved by Ref. Comm. II)

Resolution 69-6, Physician Participation in Planning for and Provision of Health Care Facilities.—This resolution was adopted by the 1969 House of Delegates and referred to the Board of Governors. Your Board referred this resolution to the Council on Medical Economics for implementation and also emphasized the importance to the county medical societies that they provide physician leadership in comprehensive health planning at a local level. One of our past presidents, Samuel M. Day, M.D., is chairman of the Florida Health Advisory Council for comprehensive health planning, and has serving with him on the Executive Committee of this Council, Irving E. Hall Jr., M.D., Wilson T. Sowder, M.D., and Mr. Harold Parham.

Resolution 69-29, Hospital Medical Staffs.—This resolution was approved in principle by the 1969 House of Delegates and referred to the Board of Governors for appropriate amendments. The Board in turn referred this subject to the Judicial Council and the Committee on Hospitals. After careful review, your Board recommends to the House of Delegates:

> Although H.B. 3887 (Hospital Medical Staffs) is approved in principle, in view of the recent action of the Governor in vetoing the bill concerning hospital privileges, we do not think it appropriate to support this legislation and believe the principle could be better implemented otherwise through strong medical staff by-laws and rules and regulations; but that if it looks as if this legislation will be passed, we should attempt to have it amended so that it is acceptable. (Approved in principle by Ref. Comm. IV; See discussion, page 66).

BOARD ACTIONS OF MAJOR IMPORTANCE

1. **Lawsuit.**—Your Board has carefully reviewed with the Association's legal counsel the progress of the suit against the Jackson Memorial Hospital in Dade City and individual members of its medical staff regarding individual hospital privileges for the osteopaths bringing the suit, and against the Florida Medical Association for violation of the Sherman Anti-Trust Act, with triple punitive damages. Your Association won this suit in the Federal District Court at Tampa and it is now pending before the Fifth District Court of Appeals. We have been advised that this court intends to request an advisory opinion from the Florida State Supreme Court regarding the privileges of osteopaths. Your Association has been threatened with other law suits, but they have not been filed at the time of the writing of this report.

2. **Workmen's Compensation.**—The Board re-appointed a special ad hoc Committee on Workmen's Compensation, headed by Dr. Joseph G. Matthews, and in cooperation with legal counsel, filed a petition before the Florida Industrial Commission with appropriate testimony under oath, requesting the Commission to adopt a fee schedule which would pay physicians for services rendered in compliance with Florida Statutes. As a result of the FMA petition, a public hearing was held on March 25, 1970, in Tallahassee. The results of this hearing will be covered in a supplemental report, as a decision has not been rendered as of this date. (Approved by Ref. Comm. V)

3. **Relative Value Studies.**—Your Board approved the recommendation of the Council on Medical Economics to continue the Relative Value Studies of the Association and authorized the appropriate expenditure of funds for this continuation, which included utilizing the services of a consultant. (Approved by Ref. Comm. V)

4. **Peer Medical Utilization Review.**—Your Board requested the Florida Medical Foundation to negotiate with Blue Shield of Florida, Inc., a contract for the services of physicians to provide peer utilization review for both Blue Shield and Medicare. This contract was executed, the county medical societies were requested to appoint review committees, and the state committee has been activated. As provided for in the contract, the activities have begun and are being implemented in this area. The Board has also adopted criteria for appeals of county committee decisions. (Approved by Ref. Comm. V)

5. **American Medical Association.**—Upon the recommendation of Florida's AMA Delegation, your Board of Governors enthusiastically supports the nomination of Jere W. Annis, M.D., for the office of President-Elect of the

American Medical Association at its annual meeting in June 1970.

6. Members Insurance Trust.—Your Board authorized, executed and amended a trust agreement and implemented a program to provide a group Blue Shield-Blue Cross and term life insurance program for physicians, their families and employees. (Approved by Ref. Comm. V)

7. Program Effectiveness System for Health Care.—Your Board approved in principle and requested the Foundation to enter into a contract, which was executed, to develop a Program Effectiveness System for Health Care.

8. Radiation Therapy.—Your Board approved in principle and requested the Florida Medical Foundation to enter into a contract with the Regional Medical Program, which was executed, to assess the capability in Florida for radiation therapy, utilizing the appropriate radiologic consultants. (Approved by Ref. Comm. I)

9. Future Meeting Locations.—The Americana Hotel, Bal Harbour, was selected for the site of the 1975 annual meeting, and the Diplomat Hotel, Hollywood, for the annual meeting in 1976. The Americana Hotel is holding dates for 1977 and the Diplomat for 1978. In addition, Disney World and the Fontainebleau Hotel are being considered for these latter two years.

10. Staff Reorganization.—Your Board reviewed a detailed report from the Executive Vice President on reorganization of the FMA executive staff, change in personnel, and the establishment of the Capitol office as authorized by the Board.

11. Postgraduate Education.—Your Board approved the recommendation of the Association's Committee on Postgraduate Education that the criteria for approval, co-sponsorship or sponsorship of postgraduate programs be amended to provide for attendance at the courses by the chairman of our Association's committee or a member of his committee. (Approved by Ref. Comm. I)

12. Public Pronouncement.—The Board authorized the preparation of appropriate statements for inclusion in the Congressional Record and for release to the public press facts dealing with the cost of medical care and in defense of the good name of the physicians of this state.

13. Joint meeting with Florida Hospital Association.—The Board reviewed the reports and recommendations of the Executive Committee resulting from joint meetings of the Executive Committee with the Executive Committee of the Florida Hospital Association and the Chairman of our Committee on Hospitals and Extended Care Facilities, held on September 30, 1969, and March 20, 1970.

14. Medical Defense Fund.—Your Board established funds for and adopted criteria for implementing a medical offense and defense fund for members of the Florida Medical Association and the protection of their good name or defense against unwarranted professional liability suits.

15. Legislative Activities.—Advised the Council on Specialty Medicine that recognized specialty groups must clear the legislative activities of their legal counsel, and legislative policies, through the FMA legislative council. (Amended by Ref. Comm. IV)

16. Medical Tours.—The Board approved a proposal of the Woman's Auxiliary to sponsor group tours abroad with the proceeds to be donated to the Florida Medical Foundation, subject to the details being satisfactory to the Association.

17. Handbook for County Medical Societies.—Publication of a revised Handbook for County Medical Society officers was authorized by the Board, and the Handbook was published in January 1970.

18. Governor's Steering Committee on Health.—The Governor's Steering Committee on Health was reactivated and designated as the medical advisory committee to Dr. James A. Bax, Secretary, Department of Health and Rehabilitative Services.

19. Proposed Regulation for Hospital Licensure.—The Board of Governors recommended to the Division of Health that a section be included in the regulations for licensure of hospitals, providing that hospitals shall furnish a statement from the State Board of Medical Examiners (and, in the case of osteopathic hospitals, from the osteopathic examining board) certifying that physicians responsible for patient care are in compliance with the pertinent laws on the practice of medicine, and that arrangements between the administration and the physicians providing care for patients in the hospital are such as to permit the practice of medicine without any improper influence, direction or impediment. (Amended by Ref. Comm. V)

20. Procedures and Policies.—Your Board adopted appropriate procedures and policies for the Council on Legislation and Public Agencies to carry out its legislative activities. (Approved by Ref. Comm. IV)

21. Migrant Labor.—The Board considered a special report regarding the health care of the migrant laborers at Immokalee and recommended that an additional appropriation be made available to the county health department at Immokalee and the Division of Health under the migrant program for care of indigents. The Florida Hospital Association was asked to concur in this recommendation. (Approved by Ref. Comm. II)

22. Health Manpower.—The Board of Governors approved the FMA's working with and through the Florida Health Manpower Council and Comprehensive Health Planning in forming a subcommittee of the Council, having a full time staff available to plan cooperative efforts and proceed with development of programs for providing supportive occupational and professional assistants, and recommended that the Secretary of the Department of Health and Rehabilitative Services provide the staffing and funding for this program through the Division of Comprehensive Health Planning. (Approved by Ref. Comm. II)

23. Extended Care Facilities.—Your Board approved the recommendation of the Committee on Hospitals and Extended Care Facilities that prior to refusal of claims for admissions to extended care facilities, the appropriate government agency or fiscal intermediary be requested to submit individual cases for local peer review, and that it be clarified that peer review means review by a doctor of medicine. (Approved by Ref. Comm. V)

24. AMA Committee on Planning and Development.—Florida's AMA delegates met and carefully considered in detail the report of the AMA Committee on Planning and Development and the minority report. Your Board of Governors approved a general statement of attitude and philosophy toward this report and also a line-by-line listing of objections to specific items. Your Board further directed that the AMA committee report, along with the general summary statement of the delegation, be sent to each county medical society with the information that the line-by-line criticisms were available from the AMA delegates if desired. Further, a special "Brief" was sent to the entire membership concerning the AMA Committee on Planning and Development report. At the time of this report, no recommendations or resolutions have been received from any component county medical society.

25. Utilization Review Committees.—The Board of Governors advised the Secretary of the Department of Health and Rehabilitative Services of the urgency of the need for legislation providing immunity from civil libel for members serving on utilization review committees.

26. Title XIX (Medicaid).—Your Board carefully reviewed the action of the Florida Legislature in appropriating inadequate funds for implementation of Title XIX (Medicaid) in the state of Florida. The Association nominated individual physicians to advise the Department of Health and Rehabilitative Services. Your Board further objected to the required method of verification of eligibility of welfare recipients for physician services under this program, and at the time of this report is conducting a study county by county on the implementation of Title XIX. The Board has requested the physicians nominated to the Title XIX advisory committee to assist the FMA staff in working with the legislative committee for proper appropriations for the Title XIX program. (Approved by Ref. Comm. IV, with the following additions):

"That the Board of Governors continue their efforts:

"1. To obtain official appointment by the Department

of Health and Rehabilitative Services of the physicians nominated to advise it;

"2. To obtain adequate funding for the Title XIX program;

"3. To change the federal regulations so as to permit the physician a freedom of choice with respect to accepting assignments."

27. Professional Liability.—Your Board reviewed several reports, recommendations and information regarding the malpractice and professional liability insurance in Florida, and appointed a special committee to carefully review and make recommendations regarding the over-all problem from a legislative standpoint, the insurance carrier standpoint, and from the standpoint of the individual physician. (Approved by Ref. Comm. V)

28. Board of Medical Examiners.— The Board recommended to the Governor and appropriate members of the Legislature to release appropriate trust funds of the Florida State Board of Medical Examiners in an amount necessary to allow it to meet its budgetary requirements, including funds for appropriate investigations and other activities. (Approved by Ref. Comm. IV—See discussion, page 74).

29. Allied Health Personnel.—The Board of Governors recommends that, in view of a proliferation of health disciplines and splintered licensure, certification and registration laws regulating them, the Association undertake a careful, indepth study of state regulation of professions and vocations delivering health care, with the objective of developing long range policy and legislation in the public interest; that the Association reaffirm its position that the statutory privileges of allied groups should be restricted through the Medical Practice Act or any way possible; and that this recommendation be referred to the Committee on State Legislation for their support if at all possible. (Approved by Ref. Comm. IV)

30. Deferred Compensation.— Your Board reviewed the report of the Investment Plan Committee and recommended that the FMA should investigate a deferred compensation program for participating physicians through Blue Shield, with the possible use of the FMA Investment Plan as the funding mechanism. (Approved by Ref. Comm. V)

31. During the year, numerous reports and recommendations of the Association's councils and committees were reviewed by the Board and action taken when appropriate.

RECOMMENDATIONS

1. Your Board approved a resolution presented by the Dade County Medical Association regarding the abolishment of cigarette advertising on radio and television and this resolution is presented to the House of Delegates as Resolution 70-11. (Approved by Ref. Comm. I)
2. Definition of Staff Self-Government.—The Board of Governors referred to the appropriate committees and councils a resolution defining staff self-government presented by the Charlotte County Medical Society and approved this definition as amended. It appears as Resolution 70-12.
3. Medical Practice Act.—The Board of Governors recommends to the House of Delegates that the following addition be made to the Medical Practice Act: "Nothing in this article shall be so construed as to prohibit service rendered by a physician's trained assistant, a registered nurse, a registered nurse midwife (nurse obstetric associate), or a licensed practical nurse if such service be rendered under the responsible supervision and control of a licensed physician." (Amended by Ref. Comm. IV)
4. After careful consideration, the Board of Governors recommends to the House of Delegates the following amendments to the current By-Laws of the Florida Medical Association, Inc.:

a. CHAPTER III, SESSIONS AND ASSEMBLIES—SECTION 1: PARTICIPATION
   1) Delete the last sentence of the first paragraph, which reads: "Each scientific assembly shall be presided over by a member of the Committee on Scientific Assemblies."

b. CHAPTER IV, HOUSE OF DELEGATES—SECTION 6: DETERMINATION OF DELEGATES
   1) "Each component society shall be entitled to select annually and to send to each meeting of the House of Delegates one delegate for every FORTY active members of the Association within that society, and one for any fraction over and above the last complete unit of FORTY, as shown on the Association's records on December 31 of the preceding calendar year, provided that each component society holding a charter from the Association shall be entitled to at least one delegate.
   "The HOUSE OF DELEGATES SHALL BE LIMITED AS NEARLY AS POSSIBLE TO A MAXIMUM OF 250 REGULARLY ELECTED MEMBERS FROM COUNTY MEDICAL SOCIETIES. THE BOARD OF GOVERNORS SHALL AUTOMATICALLY DETERMINE THE RATIO OF DELEGATES TO ACTIVE MEMBERS TO ACCOMPLISH THIS LIMIT OF THE MEMBERSHIP OF THE HOUSE. IN ADDITION TO THE DELEGATES FROM THE COUNTY MEDICAL SOCIETIES, THE MEMBERS OF THE COUNCIL ON SPECIALTY MEDICINE, THE OFFICERS AND THE MEMBERS OF THE BOARD OF GOVERNORS SHALL BE MEMBERS OF THE HOUSE OF DELEGATES."

c. CHAPTER IV, HOUSE OF DELEGATES—SECTION 14: PRIVILEGE OF FLOOR
   1) "THE PRIVILEGE OF THE FLOOR SHALL BE RESTRICTED TO SEATED DELEGATES, AMA DELEGATES, PAST PRESIDENTS, AND AMA PAST PRESIDENTS WHO ARE FMA MEMBERS, EXCEPT BY PERMISSION OF THE PRESIDING OFFICER."

d. CHAPTER VI, OFFICERS AND DELEGATES TO AMERICAN MEDICAL ASSOCIATION—SECTION 1: DEFINED
   1) "The officers of the Association are: President, President-Elect, Vice President, Secretary, Treasurer, Immediate Past President, Speaker of the House of Delegates, AND VICE SPEAKER OF THE HOUSE OF DELEGATES."

e. CHAPTER IX, COMMITTEES—SECTION 1: ORGANIZATION
   1) "Council on Allied Professions and Vocations: Committees on Dentistry, Law, Medical Assistants, Medical Technologists, Nursing, Opticians, Pharmacy, Physical Therapy and Rehabilitation, Podiatry, MEDICINE AND Religion, Veterinary Medicine, and Radiological and Nuclear Medicine Technologists, and other paramedical personnel as approved by the Board of Governors."
   2) "Council on Legislation & Public Agencies: Committees on GOVERNMENT PROGRAMS, National Legislation and State Legislation."

3) "Council on Medical Economics: Committees on Advisory to Blue Shield and Fiscal Intermediaries, COMPUTERIZATION IN MEDICINE, Health Insurance, Hospitals and Extended Care Facilities, Members' Insurance, PEER MEDICAL UTILIZATION REVIEW, PROFESSIONAL LIABILITY INSURANCE, and Relative Value Studies."

f. CHAPTER IX, COMMITTEES—SECTION 2: COMPOSITION, SELECTION AND TENURE OF COMMITTEES

1) Amend Item No. 2, The Journal and Other Publications, second paragraph, to read: "The Board of Governors shall select annually an Editor from the membership at large. The Editor shall appoint annually, subject to the Board's approval, ASSOCIATE EDITORS, ASSISTANT EDITORS, AND A CONSULTING EDITORIAL STAFF."

2) Delete Item 6, Second Paragrapb "Subcommittee on Liaison with Federal Agencies."

3) Delete Item 10 in its entirety, and renumber the remaining paragrapbs.

4) Add a new Paragraph 14, to read: "THE COUNCIL ON ALLIED PROFESSIONS AND VOCATIONS, THE COUNCIL ON MEDICAL ECONOMICS AND THE COUNCIL ON MEDICAL SERVICES: THE COMPOSITION OF ALL THE STANDING COMMITTEES OF THE COUNCIL ON ALLIED PROFESSIONS AND VOCATIONS, THE COUNCIL ON MEDICAL ECONOMICS, AND THE COUNCIL ON MEDICAL SERVICES SHALL BE LEFT TO THE DISCRETION OF THE BOARD OF GOVERNORS."

5) Add a new Paragraph 15, to read: "GOVERNMENT PROGRAMS.—THIS COMMITTEE SHALL BE COMPOSED OF MEMBERS APPOINTED BY THE BOARD OF GOVERNORS IN A NUMBER DEEMED NECESSARY TO ADEQUATELY SERVE THE FUNCTIONS OF THE COMMITTEE."

g. CHAPTER IX, COMMITTEES—SECTION 3: DUTIES AND FUNCTIONS

1) Delete the last sentence of Item 12, The Committee on Scientific Assemblies, which reads: "A member of this Committee shall preside at eacb scientific assembly."

h. CHAPTER XI, COMPONENT SOCIETIES—SECTION 6: DELEGATES TO HOUSE OF DELEGATES OF FLORIDA MEDICAL ASSOCIATION

1) "Eacb component society sball be entitled to representation in the House of Delegates of the Florida Medical Association AS PROVIDED FOR IN CHAPTER IV, SECTION 6, DETERMINATION OF DELEGATES."

Resolution 70-19
FMA Delegates

John A. Rush Jr., Delegate

Dr. Clay: "Since the subject of Resolutions 70-19 and 70-22 have been incorporated into the above change in the By-Laws, the reference committee recommends that Resolution 70-19 not be adopted."

Dr. John A. Rush, Duval: "I would like for Resolution 70-19 to be referred to the Board of Governors for further study, and so move. I feel that the purposes of 70-19 have not been met in the previous action. This does not allow direct representation from specialty organizations."

Motion to refer was seconded.

Dr. Rush: "This was introduced, not with the idea that it be implemented by this House, but that it be studied. The Reference Committee listened diligently, but did not move to refer as they should have. There are indications by the AMA of the need on the national level for this sort of study."

Motion to refer Resolution 70-19 to the Board of Governors for study carried.

Resolution 70-19
FMA Delegates

(Not Approved)

Referred to Board of Governors for Study

Whereas, Tbe specialty medical organizations within the membership of the Florida Medical Association do not have direct representation of their own selection in the House of Delegates of the Florida Medical Association, and

Whereas, Ever increasing numbers of Florida Medical Association members are becoming active in the specialty medical organizations because of the more effective approach to mutual problems by the specialty group rather than througb the widely diversified interests of the Florida Medical Association, and

Whereas, It appears desirable for closer coordination of activities and more effective conduct of programs to have direct representation of specialty medical organizations in the House of Delegates of the Florida Medical Association, now therefore be it

RESOLVED, That the House of Delegates of tbe Florida Medical Association be restructured in such a way as to allow direct representation by delegates from each recognized specialty medical organization, as well as by delegates from each component county medical society in Florida, in the House of Delegates of the Florida Medical Association.

Resolution 70-22
Membership of the House of Delegates
Alachua County Medical Society

(Not Adopted)

Dr. Clay: "The reference committee recommends that Resolution 70-22 not be adopted."

Dr. Calvin Martin, DeSoto-Hardee-Glades, raised a question concerning whether the amendment just adopted to the By-Laws would allow a county medical society with less than forty members to have a delegate. The Chair assured him that it would allow at least one, and called attention to this provision remaining in the By-Laws.

Motion carried that Resolution 70-22 not be adopted.

Report of
Subcommittee on Inter-American Relations

"The reference committee considered the report of the Subcommittee on Inter-American Relations and recommends that it be approved as printed in the Handbook."

Motion carried.

Subcommittee on Inter-American Relations

WILLIAM P. CLARKE, *Chairman*

Appreciation from the Government of Honduras was forwarded to the Florida Medical Association. The government understood, with their own war, about the problems they had and their inability to extend further courtesies to the Florida Medical Association. The Minister of Health has extended his sincere thanks for the efforts of the Florida Medical Association and all its efforts in Trujillo, Honduras, and without Florida Medical Association, they feel the success of the hospital, which bas been considerable, would be nonexistent.

It is very evident that all of Latin America has a diminished demand both on the government of the U. S. and tbat of Florida. The Viet Nam war has continued to detract from the multitude of problems within Latin America. Physicians sbould be encouraged to participate in a teaching level within Latin America, helping those governments which are friendliest, first.

Report of
Investment Plan Committee

"The reference committee considered the report of the Investment Plan Committee and recommends that it be approved as printed in the Handbook."

Motion carried.

Investment Plan Committee

BURNS A. DOBBINS JR., *Chairman*

During the past year the chairman and several committee members met with representatives of both Pan-American Life Insurance Company and Loomis-Sayles & Company, Inc., the two participants in the FMA Investment Plan, for the purpose of reviewing the status of the Plan with respect to professional associations or "professional corporations." Specific attention was directed to the following three points, which should be emphasized and made widely known to FMA members:

1) The FMA Plan has covered individuals, partnerships, *and professional associations* since 1963! No current change is needed in the master FMA Plan specifically to encompass professional associations or corporations. The FMA Plan is one of the very few of such programs to have this feature.

2) FMA members who have not yet set up a Keogh Plan and who wish to incorporate can set up a retirement plan very easily under the FMA plan.

3) FMA members who have already set up a Keogh account under the FMA plan can now set up a corporate form of retirement plan under the FMA Plan through an attractive and imaginative option devised by Pan-American Life. This unique feature maintains continuity and protection during the transition period between the Keogh Plan and the corporate plan. A special 5-year pension term insurance policy is to be made available, without evidence of insurability equal to the face amount of the old Keogh policy.

It is recognized that lack of continued growth and number of participants coming into the association's retirement plan is a result of pending national legislation relating to professional tax sheltered plans and continued efforts by the IRS to issue definite rulings effecting such plans.

The full committee met on January 30, 1970, at which time the committee and executive staff representatives of Blue Shield reviewed a film on "Deferred Compensation Plan for Physicians." There was detailed discussion of the benefits that can be provided through a deferred compensation plan mechanism.

Another item considered at the committee meeting was members' responses to the Forbes Magazine article questioning whether or not Loomis-Sayles Funds were appropriate investment fund vehicles for tbe FMA-sponsored program. In discussing this matter, Mr. Phil Weeks presented detailed information pointing out the biased and prejudiced manner in which the Forbes Magazine article attempted to be critical of medical association retirement programs and, in particular, Loomis-Sayles.

President's Address

Dr. Clay: "The reference committee acknowledges with appreciation the report of the President as presented in his address to the First House of Delegates on Wednesday and, accordingly, recommends that it be approved as presented."

Motion carried. (The complete text of the President's Address begins on page 19).

Remarks of
Speaker of the House

"The reference committee heard the Remarks of the Speaker of the House as presented to the First House of Delegates, and is grateful for the information contained therein. We recommend, Mr. Speaker, that your remarks be approved as presented."

Motion carried. (The Speaker's remarks are recorded in the proceedings of the First House of Delegates, page 23).

Report of
Judicial Council

Dr. Clay: "The reference committee considered the report of the Judicial Council, which begins on page 55 of the Handbook, and recommends that this report be approved as printed in the Handbook."

Motion carried.

Supplemental Report of
Judicial Council

"The reference committee considered the Supplemental Report of the Judicial Council which was included in the Delegates' Packets. On the first page of this Supplemental Report, lines 29-36, Recommendation No. 1, we wish to insert the

words 'as amended' at the end of line 34, so this would read '. . . urges the House of Delegates to support Resolution 70-4, as amended, which is under consideration . . .'

"Mr. Speaker, I move the adoption of this amendment."

Dr. L. E. Masters, Duval: "The Reference Committee is asking us to approve the action before the discussion on Resolution 70-4. I therefore request that action on this be deferred until the resolution is discussed."

The Speaker assured the House that Resolution 70-4 will be discussed, and stated that the question is the Reference Committee's recommendation for amendment.

The motion to amend carried.

Dr. Clay: "Mr. Speaker, the reference committee recommends the adoption of the Supplemental Report of the Judicial Council as amended."

Supplemental Report
Committee on Archives

"Mr. Speaker, the reference committee considered the supplemental report of the Committee on Archives which was included in the Delegates' Packets, and recommends that it be approved as presented."

Motion carried.

Judicial Council

JOHN J. CHELEDEN, *Chairman*

The Judicial Council met on November 2, 1969. Another meeting of the Council is planned on April 4, 1970, and actions taken at that meeting will be submitted in a supplemental report.

Medical Practice Act: The Council reviewed the revisions in the Medical Practice Act made by the 1969 legislature. Note was taken of the extreme need for more investigators for the Board of Medical Examiners. The Council requested that the State Board of Medical Examiners immediately deputize the members of the Association's Committee on Membership and Discipline and members of the Judicial Council who are not members of the Board of Medical Examiners, as individuals, to serve for the Board of Medical Examiners on call. On January 7, 1970, these members were appointed as deputy investigators for the Board, and information regarding the conducting of investigations was provided them.

Definition of Staff Self-Government: The Council considered a proposed "Definition of Staff Self-Government" submitted by the Charlotte County Medical Society. The Executive Committee amended the definition and the Judicial Council approved as amended the "Definition of Staff Self-Government."

Hiring of Unlicensed Physicians by Hospital: Correspondence from the President of a county medical society advising that a local hospital was hiring unlicensed physicians was referred to the State Board of Medical Examiners for investigation.

Internship Prior to Graduation from Medical School: The Council received a report from the Committee on Medical Licensure regarding the legality of interns accepting appointments and assuming responsibility for patient care before formal graduation from medical school. This had been considered also by the State Board of Medical Examiners, and was approved on an experimental basis.

Resolution 69-30, Blue Shield Numbers: The Executive Committee called this resolution to the attention of the Judicial Council with the information that it had been referred to the Blue Shield Board of Directors. Blue Shield had subsequently advised that they would not issue numbers to groups of physicians unless they were assured that the group's contract with the hospital in which they work is satisfactory to the Judicial Council. This resulted in voluminous work in attempting to review every contract of every group of physicians. It was decided that a check list for acceptable provisions in contracts of hospital-based physicians would be compiled, based upon house of delegates policy and that the appropriate district members of the Committee on Membership and Discipline would review such contracts according to this criteria and make recommendations to the council. Blue Shield was to be informed of the criteria and the recommendations of the review committee in order to advise the physicians involved whether or not their contract meets the criteria of this council. This criteria has also been made available to members of the Council on Specialty Medicine for their use in assisting with review of these contracts.

Resolution 69-29, Hospital Medical Staffs: This resolution was approved in principle by the House of Delegates in 1969 and referred to the Board of Governors for consideration and editing, to be resubmitted to the House in 1970. The Board in turn referred this resolution to the Judicial Council. The Council considered the resolution, and H.B. 1705 to which it pertained, and submitted its recommendations back to the Board of Governors as directed.

Miscellaneous: Other miscellaneous inquiries from individual members and county medical societies were considered and answered, based upon established association policies.

Specific Opinions of the Council: In response to requests from members and county medical societies, the following specific opinions were rendered by the Council:

Opinion No. 69-1: In view of the current policy of the FMA House of Delegates, it would be improper for x-ray film or report to be given to an osteopath by a physician; however, the film may be made available to the patient if it is desired.

Opinion No. 69-2: A change in a component county medical society's by-laws to provide membership for osteopaths would be in violation of the policy of the FMA House of Delegates and would be in conflict with the Articles of Incorporation and By-Laws of the FMA.

Opinion No. 69-3: With regard to the completion of insurance forms: It has always been the tradition for physicians to have insurance forms completed as soon as possible usually without a charge to the patient. However, whenever a patient fails to cooperate in paying a bill to the physician or whenever the patient is chronically delinquent in payment of such bill, it is not unethical for the physician to withhold completion of insurance forms until the patient has fulfilled his part of the contractual obligation by payment of the bill. Further, it is ethical for a physician to request a normal customary usual fee; and it is ethical to request pre-payment of such fee

from an insurance company where the insurance carrier requests a medical report.

Opinion No. 69-4: The Council is of the opinion that it is advisable for a physician to be present at the time of injection of dyes by an x-ray technician for I.V.P.'s.

Opinion No. 69-5: To deny an M.D. the right to obtain a life insurance license would be restricting his rights, and that the Council sees nothing improper in a physician holding such a license as long as there are no violations of applicable laws and ethics.

Opinion No. 69-6: The Florida Medical Association neither endorses, approves nor disapproves the bank credit card programs, but has no objection to the approach of members on an individual basis as to whether or not they wish to participate.

Opinion No. 69-7: It is improper for a hospital to provide unlicensed physicians to act as assistants at surgery and to bill the operating surgeon for their assistance; but for the medical staff to retain surgical assistants and pay them from a medical staff fund is appropriate.

Committee on Membership and Discipline.— The members of the Committee were individually deputized by the State Board of Medical Examiners to assist with investigation of complaints from members of the Florida Medical Association.

The committee reviewed complaints from the Medical Center Hospital in Punta Gorda, the Charlotte County Medical Society and individual physicians in the community, and a hearing was held by the appropriate district members of the committee. In addition, a joint Judicial Council and State Board of Medical Examiners hearing was held in Jacksonville in January 1970.

The committee investigated a complaint by a physician in Louisville, Kentucky, concerning medical services in Monroe County, and the situation was resolved to the satisfaction of all concerned.

RECOMMENDATION

1. That members of the Committee on Membership and Discipline deputized by the State Board of Medical Examiners be reimbursed by the State Board of Medical Examiners for expenses incurred when investigating complaints that require travel, meals and lodging away from the locale of the deputy investigator.

Committee on Archives.—The Archives Committee of the Florida Medical Association has held one meeting, a telephone conference on February 21, 1970, at which time it reviewed the year's work and plans for the future were discussed. All members except one were present.

Our activities began with the first meeting of the House of Delegates, May 1969, at which we conducted a brief memorial service in honor of our departed members and recognized those members who joined the FMA in the years 1938 and 1939. In further recognition of these members we attached streamers to their badges.

The accumulation of archives data forms on new members of the Association continues to present no significant problem. However, about half of the forms come without a picture of the applicant member. There remain a number of old members who have never completed these forms and who could assist us by so doing. These forms are obtainable from the state headquarters in Jacksonville.

Our Subcommittee on the History of Medicine Museum in St. Augustine under the able chairmanship of Dr. James J. DeVito continues to support that project. At the present time the ground floor of the Spanish Hospital is fairly well equipped and the hospital was formally opened to the public in a dedication ceremony on September 10, 1969. The FMA was represented at this ceremony by our President and several other members as is reported on pages 929-931 of the Journal of the Florida Medical Association 56: December 1969. However, little progress has been made on our plans to produce murals and later dioramas depicting the development of medicine in the state of Florida which are to be housed on the second floor of the hospital. Except for occasional donations by visitors, we have received no funds to execute this project. It is hoped that county societies, individual doctors, and possibly pharmaceutical and medical supply houses will come to our assistance. Members of the FMA are cordially invited to visit the Spanish Military Hospital when they are next in St. Augustine; we feel you will be proud of the part the FMA has played in this project. As we did last year, we will have on exhibit a scale model of the hospital at the annual FMA meeting.

Again in August 1969, the committee sponsored a historical issue of the Journal of the Florida Medical Association. A similar issue is planned for August of this year.

The project to write a history of medicine in Florida is still being pursued by the chairman of this committee and he welcomes any help that members might be able to supply. During the past year we have acquired on micro-film some very interesting Spanish archival material not previously available in this country. Mr. Luis Arana, a Spanish paleographer, is in the process of translating this material for us.

During the past year our Association has lost a number of its valued members whose names are included in the delegates' packets and in whose honor a memorial service will be held at the first meeting of the House of Delegates in the afternoon of Wednesday, May 6, 1970.

Supplemental Report
Judicial Council

The Judicial Council met on April 4, 1970, to consider two instances of violation by individual members of the Association of the rules and policies of the House of Delegates which prohibit voluntary professional association with osteopaths by doctors of medicine. In each instance, an osteopath had been admitted as a member of the medical staff upon recommendation of the medical staff. These violations on the part of certain members were called to the attention of the respective county medical societies; however, no definitive action had been instituted by the county medical societies.

After the formal hearing of facts from all concerned, each county medical society was directed to take appropriate disciplinary action against the individual members of their society who had violated the policies of the Association, and to report back to the Judicial Council the action it takes.

RECOMMENDATION

1. The Judicial Council is of the opinion that situations which have arisen in at least two counties concerning association with osteopaths are needless and unfortunate in view of individual opinions which are obviously prevalent within Florida Medical Association's membership, and therefor urges the House of Delegates to support Resolution 70-4, as amended, which is under consideration currently by the House of Delegates.

The developments in the controversy between the Charlotte County Medical Society and the Medical Center Hospital at Punta Gorda, Florida, which have occurred since the Council's last report to the House of Delegates were followed closely by the Council during the year. After efforts to resolve the controversy had failed and the situation had reached an impasse, the Council conducted a formal hearing in an attempt to resolve the matter. Invitations were extended to all parties involved in the controversy, and all were given an opportunity to present their points of view.

After formal hearing and proper review, the Council found:

1. The current Medical Center Hospital Medical Staff By-Laws, from the standpoint of staff privileges, disciplinary actions and appeals, are acceptable to the Charlotte County Medical Society representatives by their own statement, to the Judicial Council, and to all concerned, as of the date of this investigation (April 4, 1970); and
2. The current management and administration of the Medical Center Hospital are acceptable to all concerned;

Therefore, the Judicial Council is of the opinion that it is ethical to practice in this hospital *provided* the former members of the medical staff, who had served at least one year and who were arbitrarily dismissed or resigned as a result of the conflict, are reinstated to the active medical staff as of this date (April 4, 1970) with privileges commensurate with those held at the time of their dismissal or resignation.

The Council further directed that no further publicity or notoriety be given to these recommendations except through the appropriate officials of the Florida Medical Association, Inc.

In addition, the Council recommended that local citizens be added to the Board of Directors of the Medical Center Hospital, including one or more doctors of medicine.

The Judicial Council expressed its observation that it is unfortunate that the By-Laws of the hospital were not followed initially, as much of this controversy could have been prevented if the proper course of action had been followed.

RECOMMENDATIONS

2. That advertising from lay laboratories be accepted, provided all testing is supervised by a physician and no interpretations are rendered.
3. In view of the Florida Statutes, Chapter 456, relating to hypnotists, which states: "It is the intent and purpose . . . to regulate the practice of hypnosis for therapeutic purposes by providing that such hypnotic techniques shall be used only by certain practitioners of the healing arts within the limits and framework of their own particular field of competence; or by qualified persons to whom a patient may be referred, in which event the referring practitioner of the healing arts shall be responsible, severally or jointly, for any injury or damages resulting to the patient because of either his own incompetence, or the incompetence of the person to whom the patient was referred" the Judicial Council feels that it is important that the doctors of Florida be aware of their responsibilities when referring patients to limited-practice technicians.
4. It is the opinion of the Judicial Council and the State Board of Medical Examiners that polyphasic testing, electronic interpretation of EKG's, etc., constitutes the practice of medicine and therefore must have responsible medical supervision.

Committee on Medical Licensure.—During the past year the Board of Medical Examiners examined 1,750 applicants and licensed 1,335 physicians. This represents a 100 per cent increase over the previous year. The Board believes that this marked increase in applicants is a result of the abolition of the Basic Science Board which became effective July 1, 1969. The Board also believes that a substantial increase in applicants will continue indefinitely. The Board now has a full-time Executive Director as of February 1, 1970, and an office in Tallahassee, as well as the office in South Florida.

Amendments to the Medical Practice Act effective July 1, 1969, have definitely increased the work load and effectiveness of the Board, especially in the area of dealing with "sick doctors." This enables the physicians of Florida through their Board to preventively deal with physicians who are incapable of practicing competent medicine for any reason and therefore protect the public from incompetent practitioners. It is most important that we show no hesitancy in policing ourselves in the public interest as well as in the individual physician's interest. In this way we can more effectively remove incompetents from practice and rehabilitate them.

Problems of the Board are mainly budgetary. The FMA and its members must exert their influence upon the executive and legislative branches of government to provide adequate funds for sufficient personnel, equipment, supplies and salaries so that the Board can do its job to the degree that the profession and the public expect and demand. At the present time, this is not possible. The Board is completely self-supportive, using funds provided by physicians through annual registration fees, examination fees and delinquency fees. The new director feels very strongly about this and he will do his best to carry out the duties and purposes of the Board as delineated in the Medical Practice Act. There must be mutual understanding, cooperation and synergism between the Board and all members of organized medicine.

Supplemental Report
Committee on Archives

The Association has lost a number of its fine members during the past year and a list of these names is given as follows:

January 1969
Abarbanel, Milton G.—Broward
Bailey, Charles D.—Orange
Moseley, Dayton L., Jr.—Hillsborough
O'Kelley, Marion B.—Lake

February 1969
Barahona, Jorge R.—Hillsborough
Clayton, James M. Sr.—Polk
Herz, Ralph—Monroe

March 1969
Bowman, Robert N.—Dade
Horton, James A.—St. Lucie-Okeechobee-Martin

April 1969
Green, O. F.—Columbia
Hendrix, Claude A. Jr.—Broward
Toporoff, Jacob—Palm Beach

May 1969
Breakstone, Judd R.—Dade
Click, Gustav N.—Escambia
Cobos, Limbano—Hillsborough
Hollander, Abraham R.—Dade

Huntley, Earl S. Jr.—Dade
Morrison, Charles W.—Monroe
Solomon, Henry D. Sr.—Pinellas

June 1969
Jennings, John L. Jr.—Manatee
Kicklighter, James E.—Sarasota
Navarro, Jose I.—Dade
Van Schaick, Harold D.—Duval
Wakefield, Harry A.—Palm Beach
Weiffenbach, Eugene J.—Monroe

July 1969
Biher, David—Alachua
Bradshaw, Donald G.—Hillshorough
Butt, Cecil G.—Orange
Cerrato, Calvin M.—Broward
Dawson, George M.—Palm Beach
Duncan, William P.—Hillshorough
Kearn, Joseph D.—Dade
Rose, Embree R.—Alachua
Uriquiola, Joaquin—Hillsborough

August 1969
Edwards, Ray O. Jr.—Duval
Hartsfield, Richard C.—Marion
Mabry, Charles B.—Duval
Smith, Parke G.—Dade
Sternberg, J. Charles—Dade
Tallman, Maurice H.—Dade
Taylor, Joseph W. Sr.—Hillshorough

September 1969
Butter, John R.—Pinellas
Jones, Beverley B.—Dade
Sory, Curtis H.—Broward

October 1969
Elgin, Lee W. Sr.—Dade
Hogan, Cecil M.—Duval
Matthews, John B.—Pinellas

November 1969
Fomon, John J.—Dade
Haverfield, W. Tracy—Dade
Kennon, Charles L.—Dade
Marcus, Nathan L.—Hillsborough
Rinaman, James C.—Orange
Twigger, Norman A.—Broward
Welch, William B.—Dade

December 1969
Byrd, Mark M.—Palm Beach
Carswell, A. Paul Jr.—Brevard
Harris, John E.—Sarasota
Massey, J. Lloyd—Panhandle
Regan, Joseph J.—Leon-Wakulla-Jefferson
Watson, Francis M.—Panhandle
White, Alvyn, W. Jr.—Escamhia

January 1970
Butt, Thomas C.—Orange
Childs, Lincoln B.—Duval
De Padua, Virgilio B.—Duval
Dyrenforth, Lucien Y.—Duval
Litt, Edward T.—Dade
Pepper, Max—Dade
Pohlman, Louis E.—Orange

February 1970
Boles, Arthur E.—Dade
Scott, Stuart D.—Alachua

March 1970
Chapman, William H.—Duval
Pauley, Harvey C. Jr.—Manatee
Rentz, Lawson S.—Dade
Walker, Harrison A.—Dade

April 1970
Overman, William J.—Escamhia

Date Unknown
Eldridge, Marion W.—Panhandle
Sanguinetti, Alberto A.—Panhandle
Tillis, Wylie L.—Polk

Council on Special Activities

Dr. Clay: "The reference committee considered the report of the Council on Special Activities, and recommends that it be approved as printed in the Handbook."

Motion carried.

Council on Special Activities

WILLIAM C. THOMAS SR., *Chairman*

The activities under the jurisdiction of the Council have been carried out by the respective committees.

Advisory Committee to the Woman's Auxiliary.— The Committee maintained an active liaison with the Woman's Auxiliary throughout the year, during which time Dr. Gilliland, Chairman of the Committee, attended many meetings of the Auxiliary. The Committee met officially once during the year on Novemher 5, 1969. This was a joint meeting with the Structure Review Committee of the Auxiliary.

The Committee is cognizant of the fine work and cooperation the Auxiliary exhibits on behalf of FMA and offers the following recommendations for future cooperation with, and assistance to, the Auxiliary:

RECOMMENDATIONS

1. To the Board of Governors of the Florida Medical Association, that the component county medical societies be requested to use joint billings for the Woman's Auxiliary dues.
2. To the Woman's Auxiliary, that they increase their dues in the proper amount to carry out their functions and responsibilities on a sound fiscal basis.
3. To the Board of Governors of the FMA, that the county medical societies be requested to appoint an advisory committee to the Woman's Auxiliary, and to request the Auxiliary to present a report to the county medical societies annually.
4. To the Board of Governors of FMA, that it provide more direction to the Auxiliary program by recommending specific statewide projects.
5. That the resources and talents of the Woman's Auxiliary are not being adequately utilized in support of FMA programs.

Board of Past Presidents.— There has been no special meetings or activity of this distinguished committee for the past year. The one activity we have and always look forward to is the "Past Presidents' Breakfast." As the Past Presidents get younger, we hope more will gather this year for this event.

RECOMMENDATION

1. That the Past Presidents continue to attend the FMA conventions as long as possible with continued interest in the organization and the profession.

In these troubled and changing times, the Past Presidents are available for whatever purpose the organization wishes of them, individually and as a committee.

Delegates to the AMA.—The Florida Medical Association was represented at both the annual and clinical meetings by its delegates. At the annual meeting, Dr. R. B. Chrisman became ill, and his seat was filled by his alternate, Dr. Samuel Day. Subsequent to this, Dr. Chrisman resigned as an AMA delegate, and Dr. Day has assumed this position as delegate. However, Dr. Day was ill and unable to attend the Denver meeting. Since there was not an alternate for him and no other alternate was present to be seated, Dr. Babers appointed Dr. Jack Q. Cleveland to sit in this position for that session.

At the annual meeting in July, we presented seven resolutions, as directed by the House of Delegates, as follows: (1) Osteopathy; (2) Title XIX—Medicaid; (3) Fee for Service; (4) Definite Fee Arrangement for Attorneys; (5) Compliance with the Principles of Medical Ethics by all Members of the Medical Staff of a Hospital; (6) Medical School Survey; and (7) Professional Medical Liability Insurance.

There were resolutions from other component societies regarding most of these same subjects, and our resolutions were considered together with these. Substitute resolutions which included the salient parts of all the resolutions were approved as acceptable to the Florida delegation. With regard to the resolution concerning definite fee arrangement for attorneys, the Reference Committee said, "The American Medical Association should not risk losing that cooperation by attempting to advise the legal profession to change a long established and ethically approved fee arrangement." The AMA, however, will continue to work with the legal profession to attempt to solve this harassing problem. Michigan introduced the identical resolution at the Denver meeting. At that time, this was referred to the Board of Trustees for consideration and continued search for solution to the malpractice problem.

Florida Medical Foundation

"The reference committee considered the report of the Florida Medical Foundation, as included in the Delegates' Packets and as presented to the First House of Delegates on Wednesday by Dr. Peek, its President. The reference committee recommends that the report be approved as presented."

Motion carried.

Florida Medical Foundation

EUGENE G. PEEK JR., *President*

The Florida Medical Foundation, a nonprofit organization having for its purpose "to promote better medical care in Florida" was established by the Florida Medical Association's House of Delegates in May 1956. The Charter was approved in September 1956 and the By-Laws adopted in January 1957. The Foundation's first president was Dr. Edward Jelks.

In order to obtain tax exemption status, it was necessary to amend the Charter with reference to the objectives of the Foundation and this was done and approved by the Judge of the Circuit Court of Duval County in December 1958. The official ruling from the Internal Revenue Service stating that the Foundation was exempt from federal income tax and that contributions were deductible was received in January 1959.

The revised objectives of the Foundation are as follows:

1. Improvement of the health and of the medical care of the people of Florida.
2. Sponsorship of graduate and postgraduate medical education without preference for any person.
3. Aid to persons of Florida needing financial charitable assistance who are pursuing an education in medicine.
4. Aid of deserving indigent or destitute physicians who by reason of illness or mental or physical incapacity need charitable assistance.
5. The Foundation served as fiscal agent for the Hillsborough County Demonstration Project (1967) and is serving as the fiscal administrator for the Florida Advisory Council on Heart Disease, Cancer and Stroke, Inc. (Regional Medical Programs in Florida).
6. Promotion and sponsorship of medical research exclusively for public purposes and benefits.

A Trust Agreement with the Florida National Bank of Jacksonville was executed in February 1958, which has several divisions. Trust Funds have been set up for the Dade County Medical Association (1957), the Florida Academy of General Practice (1959), the Medical Center Clinic of Pensacola (1961), the Florida Association of Industrial and Railway Surgeons (1963), the Palm Beach County Medical Society (1965), the Columbia County Medical Society (1970), and the Florida Association of General Surgeons (1970), to administer medical student and intern and residency loans; agreements are in effect with the Florida United Community Funds, Inc., for a medical research program (1959); with the Florida State Board of Health for research and development programs (1959); the Tampa General Hospital Medical Staff for education and research (1961); the Marion County Medical Society for aid to needy physicians and their families (1965); the Central Florida Medical Research and Education Foundation, Inc. (1965); with the Florida Regional Medical Program, Inc., to serve as its fiscal administrator (1967), and contract with the Department of H.E.W. to develop "A Program Effectiveness System for Health Care" (1969).

The Foundation's Loan Guarantee Plan for medical students, interns and residents became operational early in 1965. A Past President's Memorial Fund has also been established for physicians in need of financial assistance.

During the year April 1, 1969 through March 31, 1970, thirty-six applications for loans were received by the Foundation, of which 31 were granted. The total amount of the loans granted was $45,000. As of March 31, 1970, the total assets in all the loan funds was $30,599.18. After deduction of the 10% recourse funds ($4,500) for the loans outstanding, the balances available for loans totaled $26,099.18.

During the year ended March 31, 1970, five applications for research funds were received and reviewed by the FMA Committee on Research and the Foundation's Board of Directors. The total amount requested in these five applications was $28,316.00. Two of these were approved and the funds granted in the amount of $8,653.00. One application is still pending. On March 31, the balance in the Florida United Community Funds, Inc., Medical Research Program Fund was $18,557.72.

The Board of Governors of the Florida Medical Association constitute the Foundation's Board of Directors. The current officers are William J. Dean, M.D., Vice President, and Floyd K. Hurt, M.D., Secretary-Treasurer. Mr. W. Harold Parham, Executive Vice President of the Florida Medical Association, serves as Executive Vice President of the Foundation.

Resolution 70-1
Restructuring of the FMA

John J. Fisher, Delegate

"The reference committee considered Resolution 70-1, Restructuring of the FMA, which was

(Continued on page 57)



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Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

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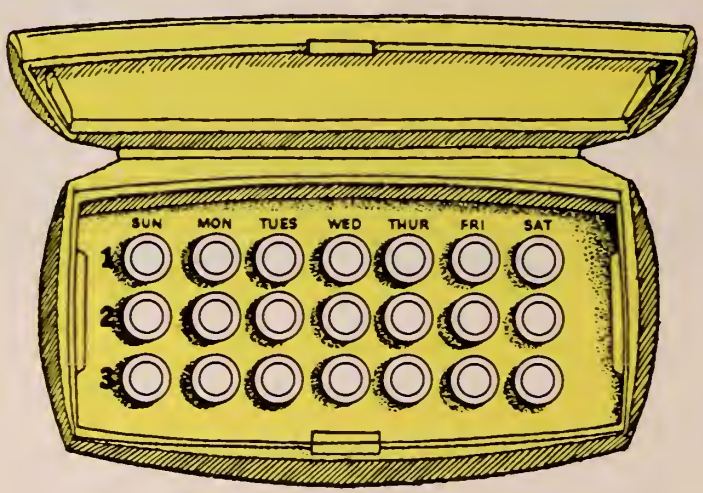
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What isn't:
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Demulen—the one oral contraceptive that provides this new combination—offers • A full measure of confidence: Unsurpassed contraceptive effectiveness, and the low estrogen content—50 mcg.—is especially significant today • A full measure of comfort: A low incidence of breakthrough bleeding and other side effects.

Demulen continues the Searle tradition of unmatched convenience. • Sunday starting, cycle after cycle: Three weeks on, one week off. There is no simpler pill-taking schedule. • A package that helps keep her on schedule: The Demulen Compack® tablet dispenser is patient-proof. Day and week of cycle are clearly designated for each tablet.

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Actions—Demulen acts to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Demulen depresses the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. 13:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969.

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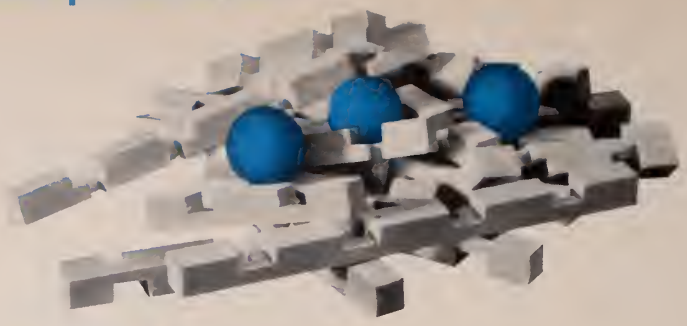
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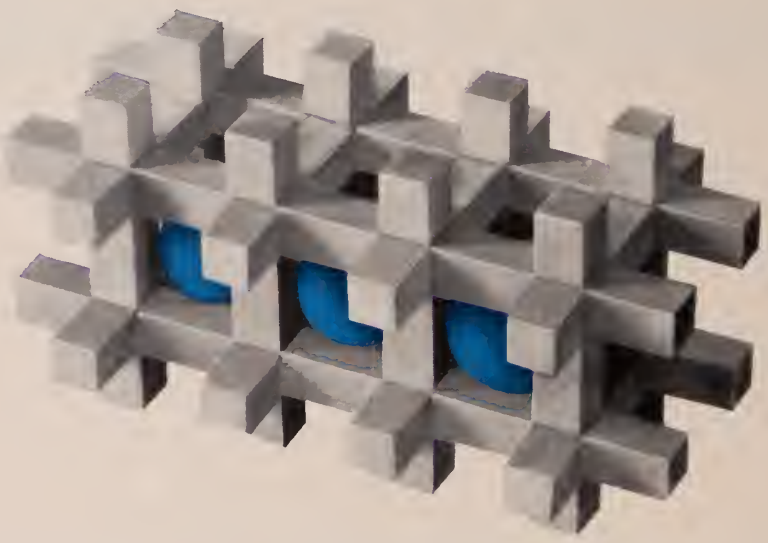
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Atropine Sulfate	0.03 mg.	Methylene Blue	5.4 mg.
Hyoscyamine	0.03 mg.	Phenyl Salicylate	18.1 mg.
Methenamine	40.3 mg.	Benzoic Acid	4.5 mg.

Contraindications: Glaucoma, urinary bladder neck or pyloric obstruction, duodenal obstruction and cardiospasm. Hypersensitivity to any of the ingredients.

Warnings: Do not exceed recommended dosages.

Precautions: Administer with caution to persons with known idiosyncrasy to atropine and cardiac disease. While under this therapy the urine is blue; patients should be so advised to allay apprehension.

Adverse Reactions: Neither irritation nor untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occurs, decrease dosage. If rapid pulse, dizziness or blurring of vision occurs, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

Dosage and Administration: Adults: Two tablets, orally, four times per day, followed by liberal fluid intake. Older children reduce dosage in proportion to age and weight.

How Supplied: Bottles of 100, 500 and 1,000 tablets.

References: (1) Sands, R.X.: New York St. J. Med. 61:2598-2602, 1961: (2) Renner, M.J., et al: Hosp. Topics 39:71-73, 1961: (3) Haas, Jr., J., and Kay L.L.: Southwest. Med. 42:30-32, 1961 (4) Marshall, W.: Clin. Med. 7:499-502, 1960: (5) Strauss, B.: Clin. Med. 4:307-310, 1957.

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printed in the Handbook. The committee is cognizant of the desirability and advisability of increasing the participation of younger physicians in organized medicine, and therefore, we recommend that Resolution 70-1 be referred to the Board of Governors with the suggestion that an ad hoc committee be appointed to study this resolution; that this committee have representative membership from the under-45 age group; and that it be directed to report its recommendations back to the House of Delegates at its next annual meeting."

Dr. Emmet Ferguson, Duval, Council on Specialty Medicine: "I would like to amend the report of the reference committee, by adding: 'The Restructuring Study Committee of the FMA is requested to give due consideration also to the Resolution 70-19 (dealing with specialty medical representation, and already referred to the Board of Governors for study)."

The amendment was seconded and carried.

The recommendation of the reference committee carried, as amended.

Resolution 70-1

(Not Approved)
(Referred to Board of Governors for Study)

Restructuring of the FMA

Whereas, The AMA at the very time it is most needed to preserve our American way of medical practice which has resulted in our nation's becoming the medical leader of the world, is annually numbering a smaller percentage of American physicians among its members and,

Whereas, If the present rate of this membership loss continues, by the end of the year 1970 the AMA will number less than fifty per cent (50%) of this nation's medical doctors as members, and

Whereas, This situation has resulted from, among other reasons, the need for more effective leadership by this body, and

Whereas, The present structure of organized medicine has been the fault for such lack of effectiveness, and has also resulted in organized medicine's failing to allow itself to take advantage of the vigor of its youthful component, and

Whereas, The AMA is only the sum total of the fifty state medical associations and their component local medical societies, and

Whereas, Any improvement in the structuring of such medical associations would result in the improvement of the national organization, therefore be it

RESOLVED, That the Duval County Medical Society, component society of the Florida Medical Association, recommend extensive restructuring of the FMA in order to correct such a fault at a local level, in turn affecting the national body directly and, hopefully, indirectly by serving as a model and pilot study for subsequent adoption by other state medical associations. To this purpose we propose:

1. The House of Delegates of the Florida Medical Association be formed into two sections, each section of which is fiscally and legislatively autonomous: the criterion for membership in each section being the chronological age of the component society member physician.

2. The senior house be called the College of the FMA, and include as its members each physician who has attained his forty-fifth (45th) birthday.

3. The junior house be called the Academy of the FMA and include as its members all physicians until they attain this forty-fifth (45th) birthday.

4. Each section to be fiscally autonomous, in that the dues paid by its membership would be kept within that division for its administrative costs and programs. The membership of the senior house in addition would pay a surcharge in addition to the regular dues, the proceeds of which would cover the expenses of the FMA executive superstructure above the two sections, as well as compensate for lack of income from those members over age seventy years and honorary members.

5. Each section to be legislatively autonomous, without power of veto over programs adopted by the other section. All resolutions at each annual session of the House of Delegates would be introduced into both houses, each meeting separately but concurrently, and considered by both houses. When such resolution is successfully passed by both houses, it becomes an FMA project; when adopted by one and defeated in the other, it would be implemented by that section which passed it and be the responsibility of that house.

A joint conference committee with equal representation of both sections would resolve minor differences between the two houses.

Changes in major medical policy would require approval of both sections of the House of Delegates.

6. Each section to nominate its own candidates for FMA officers; and each section would elect its own speaker and vice-speaker.

7. Each section would be allowed its proportionate share of delegates and alternates to the AMA and would elect these from its own membership.

8. The Board of Governors be comprised of the President, the President-elect, the Vice-President, the Secretary, the Treasurer, the Speaker of each section, the Vice-Speaker of each section, the immediate two living Past Presidents, and two members at large from each section, numbering fifteen members.

9. The Executive Committee be comprised of the President, the President-elect, the Secretary, the Speaker of each House, and the Vice-Speaker of each House, numbering seven members.

10. That the President of the FMA appoint from his section the Chairman of each Council and Committee, but that the membership of these otherwise be equally divided among the two sections.

11. That each Section has its own Executive Secretary, except that the executive secretary of the senior section *may* also be the executive secretary of the FMA.

12. That the present By-Laws of the Florida Medical Association be altered to implement the intent of the above.

OSTEOPATHY

[At this point in the Reference Committee's report, the resolutions which had been submitted dealing with osteopathy were discussed, and a resolution was adopted. However, at the beginning of the Third Meeting of the House of Delegates, a motion was carried to reconsider the subject of osteopathy. The actions which took place during both meetings are reported consecutively here. Only the motions acted upon by the House of Delegates are reported. A transcript of the full discussion of osteopathy is available to any member of the House upon request.]

ORIGINAL CONSIDERATION

(Second House of Delegates, May 9, 1970; Dr. Richard C. Clay, Chairman of Reference Committee No. III, reporting for the Reference Committee:

Resolution 70-4—Osteopathy
Duval County Medical Society

Resolution 70-7—Osteopathy
Alachua County Medical Society

Resolution 70-13—Osteopathy
Broward County Medical Association

Dr. Clay: "These three resolutions, numbers 70-4, 70-7, and 70-13, were all considered at the same time, since they all deal with the same subject—osteopathy. The reference committee offers a Substitute Resolution 70-4, to be entitled 'Osteopathy,' which would contain all the 'Whereases' of Resolution 70-4 as presented to the House in the Handbook. The 'Resolveds' would read as follows:

"RESOLVED, That osteopaths be allowed to take the examinations of the Florida State Board of Medical Examiners, following a one-year AMA-approved internship; and upon successfully passing the examination, may be appointed to staff membership of accredited hospitals without impairing the ethical standing of the FMA members on the medical staff; be it further

"RESOLVED, That consultation between doctors of medicine and doctors of osteopathy, including submission of reports, shall be considered ethical so long as no treatment or consultation by a doctor of medicine takes place in an osteopathic facility; and be it further

"RESOLVED, That osteopathic physicians not be barred from attendance at FMA approved symposia on continuing education.

"Mr. Speaker, the reference committee recommends that the reference committee's Substitute Resolution 70-4, Osteopathy, be adopted."

Dr. Straight made a substitute motion, that Resolution 70-4 be retrieved in its entirety, as a substitute motion for the recommendations of the Reference Committee, which was seconded.

Following a lengthy discussion, the Speaker clarified the question, and the motion to adopt Resolution 70-4 carried by a standing vote of 122 to 110.

MOTION TO RECONSIDER DISCUSSION

The Third Meeting of the House, May 10, 1970; the Speaker, Dr. Donegan, presiding:

Dr. Henry Wright, Hillsborough: "The Hillsborough County delegation feels that with the closeness of the vote yesterday on Resolution 70-4, and the importance of this to all county societies, that debate was prematurely cut off by the chair, we would like to open this for reconsideration." Motion seconded.

Dr. Fisher: "Was the proposer of this motion on the prevailing side yesterday?"

Dr. Wright declined to reply to the question.

Following a discussion in which several delegates participated, Dr. Jere Annis, Past President and AMA Delegate, Polk County, stated: "As a point of order: I was on the prevailing side, and I move, sir, that we reconsider this question." Motion was seconded.

The Speaker opened the floor for discussion of reconsideration of Resolution 70-4.

After discussion on the motion to reconsider, the question was called. The Speaker clarified that as of this point in time, Resolution 70-4 is a law of the House.

A written ballot was requested, and the motion to reconsider carried by written ballot by a vote of 116 to 111.

RECONSIDERATION

Dr. Hodes: "I would like to offer an amendment to Resolution 70-4. After the word 'county' at the end, strike the period and insert the following: 'semicolon; provided, however, that such ethics be reviewed and approved by the Judicial Council of the Florida Medical Association.' " The amendment was seconded.

Following discussion, the question was called on the amendment, and the amendment carried.

The floor was opened for discussion of Resolution 70-4 as amended.

Resolution 70-4 as amended was discussed by Dr. Straight, Dade; Dr. Walker, Duval; Dr. Astler, Palm Beach; Dr. Beychok, Sarasota; Dr. Daughtry, Dade; Dr. Farrell, Palm Beach; Dr. Corso, Dade; Dr. Wright, Hillsborough; Dr. Singleton, Alachua.

Dr. James Borland, Duval: "I move (1) that this entire matter be referred to the Judicial Committee for consideration and appropriate action at the next House of Delegates meeting, and (2) that any action involving the member counties be deferred until the above mentioned action has taken place." The motion to refer was seconded.

The substitute motion, to refer, was discussed by Dr. Reinstine, Duval; Dr. Straight, Dade; Dr. Hall, Manatee; Dr. Singleton, Alachua.

The motion to refer failed to carry. Consideration returned to the original motion (Resolution 70-4 as amended).

Dr. Luis Perez, Seminole: "I want to submit an amendment to the motion in question: At the end of what we already have, add: "be it further Resolved, that the hospital staff privileges be considered in a probationary basis until the osteopath takes the examination of the Florida State Board of Medical Examiners and this privilege be granted after three years of private practice and upon recommendation of three practicing physicians, or a one-year approved AMA internship; and upon passing the examination, may be appointed to full staff membership of these accredited hospitals."

Following discussion, the amendment was defeated.

A call for the question on the original motion carried.

A request was made for a written ballot. Objection was expressed to a written ballot, and a vote was taken on the question of suspending the rules to have a standing vote. The Speaker ruled the vote a two-thirds majority, and declared that the vote would be standing.

Resolution 70-4, as amended, carried by a vote of 130 to 99.

Resolution 70-4

Osteopathy

Whereas, The House of Delegates of the American Medical Association has stated and reaffirmed that it is no longer considered unethical conduct for doctors of medicine to associate with doctors of osteopathy, and the House of Delegates of the American Medical Association recently stated that qualified doctors of osteopathy could be accepted for AMA approved internship and residency programs, and

Whereas, The Florida Medical Association's charter clearly states that it will abide by the ethics of the American Medical Association, and past actions of the House of Delegates of the Florida Medical Association have precluded the professional association of doctors of medicine and osteopathy, and such actions of the House of Delegates of the Florida Medical Association have created hardships in hospital staffs in certain areas of our state, and

Whereas, Some hospital staffs have deemed it expedient to admit doctors of osteopathy to their medical staffs for the good of the hospital and the community as a whole, and

Whereas, No one rule or solution to this problem can be equally applicable in every city and community in this great state; therefore be it

RESOLVED, That henceforth the ethics of the professional relationship between doctors of medicine and osteopathy within each component society of our state will be determined by the medical society of that county; provided, however, that such ethics be reviewed and approved by the Judicial Council of the Florida Medical Association.

Resolution 70-12
Definition of Staff Self-Government
Board of Governors

Dr. Clay: "The reference committee considered Resolution 70-12, in the Handbook, and recommends that it be adopted as printed."

Motion carried.

Resolution 70-12

Definition of Staff Self-Government

INTRODUCTION:

The following working definition has been developed through the cooperative efforts of a number of representatives of Medical Staffs and county medical societies in the Florida Medical Association, together with legal consultation. Principles stated herein are based upon, or derived from, past actions and agreements of the American Medical Association and the American Hospital Association.

The physicians concerned have, of necessity, been some of those who have encountered problems in this area.

What is offered here is offered in the sense of a definition and as a reference point for counsel and for Medical Staffs and state agencies concerned in these problems.

PREAMBLE:

A basic agreement as to a division of responsibility must exist between the Board of Trustees and the Medical Staff. This appears absolutely necessary to prevent needless and harmful waste of energies on the part of the physician and hospitals since such energies are sorely needed for the care of the patients.

Elements which should be contained in this agreement include the following:

I. It shall be the function and the responsibility of the hospital Board of Trustees to provide and operate and maintain the physical facilities and the equipment used therein.

II. It shall be the function and the responsibility of the Medical Staff to provide the medical care, direct the nursing care and oversee the proper function of patient-related services within the facility.

III. There must be mutually cooperative relation between the Board of Trustees and the Medical Staff to blend their functions and responsibilities in a joint effort to provide the best possible result for the good of the patient and the community.

IV. It is hereby recognized and agreed that this *joint* responsibility can best be met by:
   1) Each group functioning within its area of defined responsibility, and
   2) Joining the two areas of responsibility in an agreement negotiated between the two parties.

V. Authority and responsibility of the Board of Trustees: In addition to the responsibilities and authorization heretofore outlined, the Board of Trustees shall be authorized to:
   1) Bring a charge or complaint against a staff member to the Medical Staff for consideration and action;
   2) Institute the dismissal of a staff member, provided that such dismissal shall have the concurrent approval of the Medical Staff after a full hearing and airing of charges before the Medical Staff.

Provided that: Where charges are brought against a Medical Staff member, he shall in all cases have the right to request an appeal and hearing to be held before a combined meeting of the Board of Trustees and Medical Staff duly assembled in quorum.

3) Provided however, that: actions of the Board of Trustees shall not place physician members of the Medical Staff in a position of conflict with or violation of the "Principles of Medical Ethics".

VI. It is recognized that the final discharge of the responsibility for quality and competence of medical services can rest only with those who possess the education, knowledge, training and skill requisite to the performance of these professional services.

VII. The responsibilities of the Medical Staff shall include:

1) The provision of medical care for those persons who become patients within the hospital facility;

2) The admission of and discharge of patients to and from the facility;

3) The recommendation of candidates for and the admission to the Medical Staff;

4) The classification of members on the Medical Staff and the assignment and definition of clinical practice privileges with the Medical Staff; while admissions must have the final approval of the Board of Trustees, classification of membership and determination of clinical privileges shall be the function solely of the Medical Staff;

5) The receiving of and evaluation of complaints and disputes concerning members of the Medical Staff;

6) The discipline of and, when the occasion shall arise, the expulsion of a member of the Medical Staff;

7) The Medical Staff shall be responsible for maintaining a high quality of clinical medical services and medical practice;

8) In order that it may carry out the internal self government made necessary by the foregoing enumerated responsibilities, the Medical Staff may have the responsibility of incorporating itself as a nonprofit entity* and entering into a contractual agreement with the Board of Trustees; furthermore, it is recognized that such corporate organization on the part of the Medical Staff will make possible the meeting of such additional responsibilities as may arise incident to the maintaining of and constant improvement of quality of medical care;

9) The Medical Staff, from its membership, shall recommend to the Board of Trustees a building and equipment committee whose function shall be to study and recommend to the Board on matters concerning the physical plant and equipment therein which are essential to the maintenance of high quality medical care within the facility. (Many excessive costs and reduplications can be avoided by joint responsibility in these areas.) (This is not to imply that such recommendation places any legal obligation upon the governing body. Rather, it is intended to define a channel of communication on such matters.)

*The most promising corporate vehicle would appear to be a nonprofit association. The Florida Medical Association has authorized its executive officers and counsel to aid Medical Staffs in formulating this corporate vehicle.

Resolution 70-27
Family Practice

Frederick C. Andrews, Delegate

Dr. Clay: "The reference committee considered Resolution 70-27, which was included in the Delegates' Packets, and recommends that it be adopted as presented."

Motion carried.

Resolution 70-27

Family Practice

Whereas, The Millis Report and other substantial and authoritative studies attest to the need for more physicians who offer primary, personal and or comprehensive care, and

Whereas, Community needs expressed directly to the offices of the Florida Medical Association currently reflect the need for additional family physicians in the State of Florida, and

Whereas, The new concept of the medical specialist in family practice has been supported by the Advisory Board for Medical Specialties and the Council on Medical Education of the American Medical Association by approval of the American Board of Family Practice, and

Whereas, The Florida Academy of General Practice strongly advocates the increase in numbers of family physicians practicing in Florida by increase in training facilities for general family practice and by other appropriate means, now therefore be it

RESOLVED, That the House of Delegates of the Florida Medical Association reaffirm its policy of support for the increase in primary, personal and or family physicians in Florida by all appropriate and practical means.

Dr. Clay: "The chairman wishes to thank the helpful and diligent members of his reference committee, Drs. Connar, Frazier, Wilcox and Pringle, without whom these deliberations would have been impossible. He also wishes to thank the members of the Association who appeared before our committee, without whom the deliberations would have been unnecessary. He also would like to thank our efficient secretary, Mrs. Wanda Bain, without whom it would have gone unrecorded.

"Mr. Speaker, this concludes the report of Reference Committee No. III."

The Speaker announced that the House would recess until 9:00 Sunday morning, if there were no objections. The House voiced objection to the recess and voted to continue. The Vice Speaker assumed the chair.

Dr. Robert Zellner, Orange, Past President: "I would like to move that this meeting recess at a specific time, and suggest the hour of 6:00 p.m."

The motion was seconded and carried.

Report of Reference Committee No. IV
Legislation and Miscellaneous

Dr. Francis C. Coleman, chairman, came forward to give the report of Reference Committee No. IV, on Legislation and Miscellaneous.

Dr. Coleman: "Mr. Speaker, Mr. President, and members of the House of Delegates: Your Reference Committee No. IV—Legislation and Miscellaneous—has considered each of the items referred to it and desires to present the following report. The Reference Committee's recommendations on each item will be submitted separately, and I respectfully suggest that each item be acted upon before going to the next."

Council on Legislation and Public Agencies

"The first section of this report was that of the Committee on National Legislation. Specific bills which physicians should understand and follow closely include:

a. Health Insurance Benefit Act Amendments (Medicare).
b. Medicredit Program.
c. Manpower Legislation.

"Your Reference Committee was impressed with the active attention given to our national legislative problems and wishes to commend the Committee on National Legislation, of which Dr. Joseph C. Von Thron is Chairman, for its outstanding work.

"The Committee on State Legislation reported on the establishment of a full time Florida Medical Association office in Tallahassee. Your Reference Committee believes that the establishment of this office has strengthened our state legislative program.

"Many members of the Florida Medical Association have contributed their time as 'Doctor of the Day' in the Capitol dispensary and these physicians are due our gratitude and appreciation.

"The establishment of Key Contact Physicians throughout the state was noted and the importance of these physician contacts was stressed by the Chairman of the Committee on State Legislation.

"Dr. Sanford Mullen, chairman of the committee, gave us an up-to-the minute report on the status of the state legislative program of the Florida Medical Association. On page 63 of the Handbook, under Item 4, lines 29 to 48, there is a good possibility that items (2), (3) and (4) as set forth in this report may become law. Item (1), lines 38-39, Posting of Bonds, has been defeated in the Senate subcommittee and has very little chance of passage in this session of the legislature.

"Your Reference Committee believes that the Florida Medical Association should continue its efforts in solving the professional liability problem and believes that additional legislation should be considered as warranted.

"The last portion of the report (pp. 64, 65, and the first two paragraphs on p. 66) deals with liaison with state agencies: Liaison seems to be satisfactory with most agencies, but it is obvious that the reorganization of the state government under the new constitution has created some problems in this area.

"RECOMMENDATIONS: This report contains three recommendations. In Recommendation



Reference Committee IV personnel were Drs. Karl B. Hanson, Ray E. Murphy Jr., Francis C. Coleman (Chairman), Robert N. Webster, Rufus K. Broadaway and Robert E. Zellner, AMA Delegate (not shown). Mrs. Mae Mason was recording secretary.

No. 1, p. 66, there is a typographical error. It should refer to 'legislative program' instead of 'scientific program.'

"Your Reference Committee recommends the adoption of these three recommendations as amended."

Motion carried.

"Your Reference Committee further notes the commendation by the Council on Legislation and Public Agencies of our president, Dr. Henry Babers, for his active interest, and of Dr. Sanford Mullen, chairman of the Committee on State Legislation, for outstanding service to the many legislative programs and actively supports these commendations.

"Your Reference Committee recommends adoption of the report of the Council on Legislation and Public Agencies as a whole as printed in the Handbook, with the editorial corrections noted above."

Motion carried.

Supplemental Report
Council on Legislation and Public Agencies
(Committee on State Legislation)

"This supplemental report which was dated May 1, 1970, under Item A, described some changes in the Medical Practice Act that are currently under consideration by the Florida Legislature. One of these changes would provide for licensure by endorsement or examination, with discretionary powers left to the Board of Medical Examiners. This change was recommended by the Council on Legislation and Public Agencies, but testimony before your Reference Committee by members of the State Board of Medical Examiners indicated strongly that they do not favor this change.

"Your Reference Committee was advised that a study by the Council on Health Manpower of the American Medical Association has shown that the presence or absence of endorsement by state boards of medical examiners has little to do with maldistribution of physicians. Florida and Hawaii, two states which require examination of all candidates for licensure, rank near the top in the number of physicians practicing in the state per 100,000 population.

"Dr. George S. Palmer, Executive Director and Dr. Vernon B. Astler, member of the State Board of Medical Examiners, explained that it would be impossible to keep constantly informed on the adequacy of the medical examinations for licensure in all 50 states. Dr. Palmer further explained that these examinations vary from very stringent examinations on which about 25% of the applicants fail, to simple 15-minute oral examinations in some states which can be passed by any applicant. He also said that these are subject to change by the various state legislatures or by regulation of the board itself.

"The need for more physicians in Florida was brought forcibly to the attention of your Reference Committee, but we do not believe that this proposed change in the Medical Practice Act would alleviate our physician shortage.

"Your Reference Committee therefore recommends that Recommendation No. 1 [not be adopted and that the Florida Medical Association oppose this change in the Medical Practice Act.]"

Dr. Sanford Mullen, Council on Specialty Medicine: "We have been considering this proposal by the Reference Committee and feel that it is probably too restrictive, and it would unnecessarily keep us from considering possible changes in the year ahead. Since as you know we will not be in session again until the next 1971 session of the legislature is well under way, we would like to suggest this change in the reference committee's recommendation: '. . . that Recommendation No. 1 not be adopted at this time, and that the House of Delegates refer this suggested change in the Medical Practice Act to the Board of Governors for further study.'" The amendment was seconded and carried.

The recommendation carried as amended.

"The second recommendation would allow the Board of Medical Examiners to examine noncitizens so that an applicant could be eligible for licensure as long as he had filed his intention to become a citizen. Your Reference Committee was advised that legislation is currently pending in the Florida Legislature to amend the Medical Practice Act in this way.

"Your Reference Committee is aware of the recently created Commission on Foreign Medical Graduates sponsored by the American Medical Association, the American Hospital Association, the American Association of Medical Colleges, the Association for Hospital Medical Education, the Educational Council for Foreign Medical Graduates, the Federation of State Medical Boards and the National Medical Association, to concern itself with problems relating to the more than 10,000 foreign physicians entering the United States each year. Since this new Commission has not had sufficient time to effectively explore the problems

relating to foreign medical graduates, your Reference Committee believes that it is premature for Florida to change its Medical Practice Act by eliminating its citizenship requirement.

"Your Reference Committee, therefore, recommends that Recommendation No. 2 *not* be adopted, but that this subject be kept under continuing study."

Dr. Richard Hodes, Hillsborough, made a substitute motion that Recommendation No. 2 be adopted by the House. The substitute was seconded. "All the other qualifications would remain; this legislation would simply mean that noncitizens could be examined, as long as they have filed intention of becoming a citizen. We now have legislation pending which removes the disability of noncitizenship from the examinee."

Dr. Vernon Astler, Palm Beach: "The Board of Medical Examiners has considered this and are not in favor of it. There are over 13,000 holding Florida licenses, almost half of which live outside the state. Citizenship is now a requirement and I see no fault with this. It is a privilege to practice medicine; this requires an individual to do certain things to gain the privilege, including renouncing any tie with a foreign country."

The substitute motion failed to carry.

The original motion of the Reference Committee carried.

"Recommendation No. 3 requires no action because it was contingent upon favorable enactment of Recommendations 1 and 2.

"Item *B* of the Supplemental Report of the Council on Legislation and Public Agencies contains a statement from the Board of Governors. Note was made of the committee report regarding a more complete definition of the practice of medicine in the Medical Practice Act and we recommend that this be referred back to the Board of Governors for continuing study and possible legislative action next year."

Motion carried.

"Your Reference Committee recommends adoption of the supplemental report of the Council on Legislation and Public Agencies as amended."

Motion carried.

Council on Legislation and Public Agencies

JOSEPH C. VON THRON, *Chairman*

The Council on Legislation and Public Agencies watched carefully the acerbities directed at the medical profession due to the spiraling costs related to Medicare. The Council encourages all physicians to defend organized medicine's position positively.

a. Ten years ago the AMA accurately predicted, and conversely the bureaucrats understated the eventual expense of the Medicare program.
b. All physicians should encourage active peer utilization review committees to thwart the rare and isolated offender.

The Council commends both our President, Henry Babers, for his most active interest, and Sanford Mullen, State Legislation Chairman, for outstanding service to the many legislative programs.

Committee on National Legislation—The resolution by Dr. Jack Cleveland, Past President of FMA, made in 1966 endorsing FLAMPAC-AMPAC finally reached fruition as both the President and the President-elect of FMA attended the AMPAC Conference in Washington this year, and the joint billing became a reality in most of the counties within our state. This all contributed to:

a. Educating the profession on political matters, and
b. Seeking to influence the election of conservative congressmen from every state.

The Board of Governors approved the recommendation made in 1968 making contributions available for a congressman to travel to his home for discussion of matters pertaining to medical legislation with the local physician constituency.

Legislative plans are now being consummated for our annual entourage to Washington to visit with the Florida delegation.

The Senate Finance Committee (Senator Long, (d), Louisiana, Chairman) released in early February a strongly worded 323 page long report recommending a number of sweeping changes in Medicare and Medicaid to control costs. Blame, despite warnings now without vindication is placed on the providers of the service. On physicians, the report warns that Congress will take control unless the medical profession polices itself. "We feel that eventually insurmountable pressure will develop for alternative control, procedures which may be arbitrary, rigid, and insensitive to the legitimate needs of both the physician and his patient." Medicare problems regarding physicians include:

a. Fee schedules and/or limits of allowable fees
b. Limiting physicians' incomes via SSA directives and BS statistical methods used to determine fees.
c. Identifying publicly physicians who receive more than $25,000 per year from federal programs.

Specific bills which physicians should understand and follow closely include:

a. Health Insurance Benefit Act
b. Medicredit Program
c. Manpower legislation

Subcommittees:

Committee on Veterans Administration—There were no notable activities of this committee during the past year. On the VA scene, complaints have been few and no major discussion insued between the VA and physicians of Florida Medical Association that the committee is aware of.

Committee on State Legislation—The committee has had an active year with responsibilities for coordinating all state legislation for the Florida Medical Association and recognized medical specialty groups. Three formal meetings of the committee have been held along with countless informal conferences among committee members. The highlight of the formal sessions was the Legislative Seminar at the annual Conference of Presidents and Secretaries of County Medical Societies in Orlando on January 30-February 1, 1970.

The committee has worked closely with the Board of Governors in developing a legislative program for the 1970 session of the Florida Legislature. The program is based on the FMA policies as established by the FMA House of Delegates.

The following items sum up the phases of the committee's activities:

1. Establishment of a full-time Tallahassee Office: On October 1, 1969, a full-time office in the Tallahassee Bank Building was established. The office is under the direct supervision of Donald S. Fraser Jr. Mr. Fraser's activities are under the control of the FMA Executive Vice President, Mr. W. Harold Parham. The professional activities of Mr. Fraser are directed by the Committee on State Legislation under the policies of the Board of Governors. It has become necessary to establish this office because of annual legislative sessions, along with the continuing activities of various state agencies and bureaus. Standing committees of the legislature are in session throughout the year.

2. The Capitol Dispensary: The committee has worked to continue the Capitol Dispensary which has proven to be most effective in meeting the medical needs of legislators and their staffs. Physician members of the FMA have given great support in serving as "Doctor of the Day" at the Dispensary.

3. Key Contact Physicians: An active program to develop physicians who have close relationships with legislators to help them in evaluating legislative items of medical interest has been developed. This program of physician contacts is highly important because it gives the legislators confidence in consideration of medical legislation because they have the opportunity to discuss these matters with physicians whom they know personally.

4. Specific Legislative Activities: The principal legislative objectives set for the coming session are:

   a. Passage of legislation that would relieve the problems being faced in the area of professional liability and malpractice insurance. Proposals that have been drafted by FMA legal counsel for presentation to the legislature include:
      (1) Posting of bonds (The plaintiff must post a bond in a malpractice suit)
      (2) Res ipsa loquitur (Elimination of this doctrine "the thing speaks for itself")
      (3) Expert Witness (A physician would not have to testify against himself as an expert)
      (4) Reduce Statute of Limitations from four years to two years
   b. Sustain the Governor's veto of Committee Substitute for House Bill 348 (Osteopathic hospital privileges bill).
   c. Defeat House Bill 994 (Mandatory Chiropractic Insurance Coverage).
   d. Prevent the inclusion of chiropractors in the Title XIX (Medicaid) program.
   e. Secure passage of state-wide post mortem medical examiners bill.
   f. Pass legislation exempting members of utilization review committees from liability when they are serving with regard to public assistance programs.

Subcommittees:

Liaison with State Agencies—There was no formal meeting of the committee for two reasons: (1) This is a large, loosely held together committee in which each member is assigned to a specific state department; (2) There was a change in the state constitution and reassignment of agencies.

Commission on Aging—Due to government reorganization, the Commission on Aging is no longer in existence.

Alcoholic Rehabilitation—Although there has been no major change in the program, the name is now that of the Bureau of Alcoholic Rehabilitation and is now a Bureau under the Department of Health and Rehabilitative Services. It should be noted that the Director of the Department of Health and Rehabilitative Services does take a decided interest in our particular Bureau within the Division of Mental Health.

A new building has been constructed at Avon Park for both education and treatment and is expected to be activated in April of 1970 for a full schedule of trainees, to include, social workers, physicians, psychologists, judges, and nurses, as far as the education side is concerned. There will be short orientation courses for Vocational Rehabilitation Counselors as well as long-term training of importance to such people as emergency room nurses who will then return to their local Florida hospitals. It is important for the Florida Medical Association to continue supporting the principle of emphasizing education and research in training teams of local people to return to their communities to treat problems at the sources. The Center can treat 800 patients a year. According to Mr. Joseph Ziesenheim, chief, Bureau of Alcoholic Rehabilitation, there are 65,000 public drunkenness arrests alone in the state of Florida. We need to continue to augment and insist upon development of local community responsibility.

From a purely medical standpoint it is fortunate that the alcoholic program is initiating a plan of having a team from the Avon Park Center present a panel on alcoholism problems to county medical societies. The first has been conducted in Hillsborough County and it is felt the various local medical societies should have this team as one of their county medical programs during the year 1970-71.

Bureau of Blind Services—The Florida Council for the Blind is now the Bureau of Blind Services, Division of Vocational Rehabilitation, Department of Health and Rehabilitative Services. The Council, which was composed of lay members and who directed the agency, is still in existence as an advisory committee only.

The Bureau of Blind Services is still acting in the same capacity as before; that is, providing services to blind people of limited income. The program is naturally affected by Medicare and will also be affected by Medicaid, but will probably continue along the same general pattern in which it has functioned in the past.

Department of Education—Relations with the Department of Education for the past year have been excellent.

The FMA Committee on Child Health serves as School Health Medical Advisory Committee to the Department of Education and the Division of Health, Department of Health and Rehabilitative Services. In this capacity, the Committee holds regular quarterly meetings at which appropriate staff members from the Department of Education are present. A variety of matters affecting Florida's public schools are considered and acted upon. Recommendations emanating from the Committee are implemented through the Department of Education.

The committee feels that the relationship between the Florida Medical Association and the Florida Department of Education is unique. We hope to make this mechanism even more effective in the future.

Tuberculosis Board—Under the new constitution and government reorganization, the Tuberculosis Board no longer exists in any capacity.

Mental Retardation—Work has been concentrated this year on preparing for a program on Mental Retardation to be presented as part of the general sessions at the 1970 Annual Meeting of the Florida Medical Association. Talks will be given by several authorities in the field in general, and a question and answer period will permit time for discussion.

Department of Commerce, Division of Labor—During the year 1969, close liaison was maintained with the Florida Industrial Commission, now called the Department of Commerce, Division of Labor, under government reorganization. The committee continued to cooperate with the Commission, particularly relating to claims, and did on many occasions review questions submitted by this department, to make the handling of doctor claims easier. Frequently it is a matter of interpreting what procedure should be labeled what, and on many occasions actually translating medical terminology to lay terminology. The committee made no effort to up-date the Medical Fee Schedule as this endeavor is being carried out by the FMA ad hoc Committee on Workmen's Compensation.

It was felt that the liaison between the staff of the Florida Industrial Commission and the Florida Medical Association was quite good and excellent cooperation was

received, specifically from Mr. Garner, Mr. Swing and Mr. Herbert.

Division of Mental Health—Liaison with the Division of Mental Health has been maintained largely through the Association's Committee on Mental Health and its activities. During the past year, the Division's emphasis has been upon development of the Community Mental Health Centers program, to minimize the patient load in state hospitals and provide care insofar as possible in patients' home areas. For details, reference is suggested to the annual report of the Committee on Mental Health and the Council on Medical Services.

RECOMMENDATIONS

1. Support of the legislative program described in order to increase interest and support in this area.
2. Continue efforts to bring better liaison between the staffs working in the various facilities for care of the mentally retarded and the Florida Medical Association.
3. Closer liaison with lay groups working the field of mental retardation.

Supplemental Report

Council on Legislation and Public Agencies

Committee on State Legislation

A. Changes in Medical Practice Act

The Committee on State Legislation was advised of the determination and pressure by members of the Florida legislature for some type of legislation dealing with reciprocity for medical licensure in Florida.

Your committee does not request any form of reciprocity at the present time but does recommend:

(Referred to Board of Governors)

1. Approval in principle of licensure by endorsement or examination with discretionary powers left to the Board of Medical Examiners.

[2. Waiver of citizenship—Not Adopted.]

B. Definition of Practice of Medicine

The Board of Governors presented the following statement to the committee for its consideration and recommendation:

"That, in view of a proliferation of health disciplines and splintered licensure, certification and registration laws regulating them, the Association undertake a careful, indepth study of state regulation of professions and vocations delivering health care, with the objective of developing long range policy and legislation in the public interest; that the Association reaffirm its position that the statutory privileges of allied groups should be restricted through the Medical Practice Act or any way possible; that this recommendation be referred to the Committee on State Legislation for their support if at all possible."

After an indepth discussion of this matter the following resolution was passed:

(Referred to Board of Governors)

That the Florida Medical Association sponsor an amendment to the Medical Practice Act that will more adequately and fully define the practice of medicine and that in addition professions exempted from the Medical Practice Act be limited to osteopathy, podiatry and dentistry.

Council on Specialty Medicine

Recommendation (Medical Practice Act)

"This recommendation of the Council on Specialty Medicine is very similar to Item 8 in the supplemental report of the Council on Legislation and State Agencies just considered.

"Your Reference Committee recommends that this portion of the report of the Council on Specialty Medicine also be referred to the Board of Governors for further study and possible legislative action next year."

Motion carried. (See report of Council on Specialty Medicine, page 32).

Council on Medical Services

Recommendation No. 3 (Plasmapheresis)

"Your Reference Committee was advised that the Report of the Committee on Blood, dealing with plasmapheresis, was considered by Reference Committee No. II—Public Policy, and that this report contains a recommendation that the State Board of Medical Examiners be asked to assume the responsibility for developing regulations for plasmapheresis. Since it is not clear at this time whether legislation would be required to enable the State Board of Medical Examiners to assume this responsibility, your Reference Committee recommends that no action on Recommendation No. 3 of the Council on Medical Services be taken at this time, but that this item be referred to the Board of Governors for active study."

Motion carried. (See report of Council on Medical Services, page 38).

Recommendation No. 8 (Abortion Legislation)

"There was much discussion on Recommendation No. 8 and the Board of Governors' note on p. 36 before your Reference Committee. At the request of your committee, Dr. Frank Parish, Chairman of the Committee on Maternal Health, was asked to prepare a statement for consideration by the committee which would clarify Recommendation No. 8 and the Board of Governors' note. The statement submitted by Dr. Parish is as follows:

Recommendation by FMA to the State Legislature with Reference to the Abortion Law.

'The Florida Medical Association believes that the liberalization of the abortion law in

the State of Florida should be passed; however, it is believed that the North Carolina type law is preferable to the Hawaii type law. With this in mind, the following recommendations are made:

'1. An abortion may be performed to protect the life or the health of the mother, health of the mother to include physical or mental health.

'2. An abortion should be allowed when there is a reasonable medical certainty that the pregnancy would result in a defective child.

'3. Abortion should be allowed following rape, statutory or forceful, and incest.

'4. Consideration should be given to establishing a residency requirement of three months.

'This recommendation by the FMA is further made because of recent court decisions in the United States which would indicate that our present law allowing abortion only to save the life of the mother may soon be declared unconstitutional and this would result in no abortion law for the State of Florida. It is believed that guidelines for abortion by physicians on legal grounds should be definite.'

"Your Reference Committee is concerned about the possibility of a future court decision rendering Florida's present abortion law invalid and believes that immediate legislative action is necessary, since the principles set forth in this statement by Dr. Parish may be achievable in the current session of the Florida Legislature.

"Your Reference Committee therefore recommends that this statement be substituted for Recommendation 8 and the Board of Governors' note and that it be adopted."

Motion carried. (See report of Council on Medical Services, page 39).

Recommendation No. 9 (Mental Health Legislation)

"All testimony before your Reference Committee was favorable on Recommendation No. 9. Your Reference Committee therefore recommends adoption of this recommendation."

Motion carried. (See report of Council on Medical Services, page 39).

Recommendation No. 15 (Pesticide Control Legislation)

"Testimony before your Reference Committee by Dr. Richard Hodes, Chairman of the Public Health and Welfare Committee of the House of Representatives, indicated that legislation of the type proposed in Recommendation No. 15 is currently being considered by the Florida Legislature and that this legislation has an excellent chance of passage. Although adoption of this recommendation would not appear necessary to achieve a satisfactory legislative result, your Reference Committee is in sympathy with its intent, but believes that the words 'hastily conceived' (line 36) should be deleted.

"Recommendation No. 15 would therefore read:

> '15. That the Association (a) express concern over the increasing problem of toxic pesticides in the environment, (b) recognize the need for controls upon indiscriminate and unsafe use of pesticides, (c) support further scientific study in this field, and (d) not support legislative measures totally banning such agents.'

"Your Reference Committee recommends the adoption of this recommendation as amended."

Dr. Charles Kahn, Escambia: "I offer an amendment, to substitute the word 'immediately' for the word 'totally' [so item (d) would read: 'not support legislative measures immediately banning such agents'], as I think that in the future we would be able to support total banning." The amendment was seconded.

Dr. Hodes discussed the amendment.

The amendment carried; the recommendation of the Reference Committee carried as amended. (See report of Council on Medical Services, page 39).

Report of Board of Governors

Resolution 69-29

"This resolution dealing with 'Hospital Medical Staffs,' was approved in principle by the 1969 House of Delegates and referred to the Board of Governors for appropriate amendments. After consultation with the Judicial Council and the Committee on Hospitals, the Board of Governors stated that it was not appropriate to support this legislation and believed that the principles contained in it could be better implemented otherwise through stronger medical staff by-laws and rules and regulations.

"Testimony before your Reference Committee indicated that H.B. 1705, with which Resolution 69-29 was concerned, has been re-drafted and is now in more acceptable form. Testimony also was presented, however, that active support of this re-drafted bill No. H.B. 3887 by the Florida Medical Association would place the Association

in an inconsistent position with respect to support of the Governor's veto of H.B. 348 (the Osteopathic Hospital Privilege Bill).

"Your Reference Committee is in sympathy with the intent of H.B. 3887, but believes that active support of it by the Florida Medical Association at this time might well result in an overriding of the Governor's veto of H.B. 348. For this reason, your Reference Committee recommends that H.B. 3887 be endorsed in principle, but that no active support be given during the current session of the Florida Legislature."

Dr. Harold Yount, Palm Beach: "I would like to offer an amendment, in the last three lines of the reference committee recommendation, to put the recommendation on a positive basis. Rather than saying "but that no active support be given," amend it to read "and that active support be given." This puts the whole thing on a positive basis and there is no room for confusion."

Dr. Mullen: "This whole issue is confusing to most of us. Our attitude has been such that we have very forcefully throughout the state attempted to inform the Governor and the legislators that we did not want the state legislature involved in diluting the authority of local Boards to decide who should practice medicine on our medical staffs. This is the position for which we have fought so long, and we think we will prevail in sustaining the Governor's veto. Our reason for concern over this particular bill is that this would seem to say that we do need the legislature to involve itself. This puts us in an inconsistent and untenable position."

Dr. Yount: "This is being clouded. Let's define what this bill does, and what Substitute 348 does. Substitute Bill 348, which the Governor vetoed, says you have to take osteopaths on the hospital staff. This bill says the administration can not throw a man off the staff. There is nothing inconsistent about these two bills. There is nothing about it that takes it out of the hands of the hospital staff. After consideration by several committees, the legal counsel for the Board of Medical Examiners rewrote the bill. The rewrite says that if the hospital administration throws a man off the staff, he can appeal to the Board of Medical Examiners and they will hear his case. This protects the doctor being simply thrown off the staff, throwing the patients into confusion, when there is no reason for it. At the same time, if he needs throwing off the staff, the hospital administration should be more than grateful for this law, which would put the Board of Medical Examiners squarely behind them. There are third party pressures brought to bear upon hospital administrators, for financial and other reasons. Also, there is a move afoot to try to force all doctors into groups; and there is a move afoot to try to contract out medical care on a capitation basis. This law doesn't ask for a thing except a fair deal for the doctors. It is not abrasive nor even aggressive; but it is a defense weapon. Let's defend ourselves. I don't understand the opposition to this bill."

Dr. Zellner: "I can certainly understand the intent, the protection, of this bill; but this is the wrong way to do it. I went to Tallahassee with a group of doctors to talk to the Governor about vetoing C.S. 348. We gave him a number of reasons why he should veto it. He selected just one of these reasons—he said there are enough laws to regulate medical staffs now; we don't need the legislature to do it. Nobody could say it better than the Governor has. At a time when we are objecting to the federal government, state government, and everybody else telling us how to run our business, we are going to the legislature and asking them to keep us on the hospital staff. We might be opening the door for them to tell us how to run our business year after year. The intent of the bill may be good, but it is a very bad way to do it, and I urge you to sustain the Reference Committee's recommendations."

A motion to table failed to carry.

The amendment failed to carry.

The recommendation of the Reference Committee carried. (See report of Board of Governors, page 47).

The House recessed, to reconvene at 9:00 a.m. on Sunday, May 10, 1970.



Senator Robert W. Packwood, Oregon, was guest speaker at the FLAMPAC luncheon on Friday, May 8.

Third House of Delegates

The third meeting of the House of Delegates convened at 9:10 a.m. on Sunday, May 10, 1970, in the Regency Room of the Diplomat Hotel, Hollywood-by-the-Sea, with Dr. Charles K. Donegan, Speaker of the House, presiding.

Dr. Thompson, Chairman of the Credentials Committee, reported 245 delegates present, representing a quorum of eligible delegates and a majority of component county medical societies represented. Dr. Thompson moved that the House be seated.

Motion carried.

DELEGATES

ALACHUA—John W. Andrews, Billy Brashear, Edward G. Byrne, George T. Singleton, I. Irving Weintraub (Absent—J. Russell Green Jr., William C. Ruffin Jr.).
BAY—(Absent—John F. Mason Jr., James A. Poyner).
BREVARD—Jack Bechtel, Donald Bryan, N. Frank Fain Jr., Michael Foley, John Kaminski, Robert Seelman, Joseph Von Thron.
BROWARD—Robert L. Andreae, Robert J. Brennan, Gordon B. Carver, Frederick W. Fisher, Paul E. Gutman, David C. Lane, John H. Mickley, Ray E. Murphy Jr., Henry D. Perry Jr., Daniel C. Smith, W. Dotson Wells, John I. Williams (Absent—Miles J. Bielek, Richard S. Doyle, John R. Mahoney, J. G. McAllister, Robert U. Moersch, Robert H. Pfeifer, Lees M. Schadel, Diran M. Seropian).
CHARLOTTE—Carl N. Reilly.
CLAY—William A. Mulford.
COLLIER—Fred A. Butler (Absent — Courtlandt D. Berry).
COLUMBIA—Frank E. Adel.
DADE—Julius Alexander, David J. Becker, Jerome Benson, Rufus K. Broadaway, James B. Byrne, Gerard Carter, Richard C. Clay, Vincent P. Corso, Edward Cullipher, John E. Cunio, Dewitt C. Daughtry, Joseph Davis, Richard C. Dever, Robert F. Dickey, Lee Dockery, L. W. Dowlen, Miguel Figueroa, Joseph Fitzgerald, M. Eugene Flipse, James J. Goodman, Leo Grossman, Henry Hardin, C. D. Holmes Jr., James W. Holmes, James T. Hutson, Albert C. Jaslow, Walter Jones III, Simon I. Kemp, Eugene Konrad, H. A. P. Leininger, Ronald Mann, Donald Marion, Ildefonso R. Mas, Charles A. Monnin Jr., Sheldon D. Munach, G. B. Paxton Jr., James C. Pringle Jr., Walter Sackett Jr., Daniel L. Seckinger, Everett Shocket, Gilbert B. Snyder, Donald Stannus, Chauncey Stone Jr., Mario Stone, William Straight, Charles F. Tate, Maynard Taylor, Arthur Wood Jr., Scheffel Wright (Absent—Clinton L. Border, Harvey E. Brown, Manuel L. Carbonell, Chester Cassell, Francis Cooke, Victor D. Dembrow, Milton Goldman, Maurice Greenfield, Jim C. Hirschman, Paul Jarrett, James R. Jude, Robert Katims, John Liebler, Walter Sackett Jr., M. Murray Schechter, Nelson Zivitz).
DESOTO-HARDEE-GLADES—Calvin Martin.
DUVAL—James L. Borland Jr., Robert J. Brown, Clyde M. Collins, James H. Corwin II, Thomas S. Edwards, Joseph Farrington, John J. Fisher, Stephen P. Gyland Jr., Donald R. Hagel, Karl B. Hanson, L. E. Masters, Thad Moseley, Harry W. Reinstine Jr., C. Burling Roesch, John A. Rush Jr., Guy T. Selander, William A. Van Nortwick, James W. Walker.
ESCAMBIA—W. A. Covell, Charles J. Kahn, Julian O. Olsen Jr., Philip B. Phillips, Earl G. Wolf (Absent—Lockland V. Tyler).
FRANKLIN-GULF—Joe Hendrix.
HIGHLANDS—Donald C. Hartwell.
HILLSBOROUGH—Richard H. Blank, Ernest R. Bourkard, Francis C. Coleman, Richard G. Connar, John C. Fletcher, Richard S. Hodes, James M. Ingram, Victor H. Knight, Eugene B. Maxwell, W. Mahon Myers, Charles L. Pope, William W. Trice, Harold L. Williamson, James A. Winslow, Henry L. Wright.
INDIAN RIVER—Hampton L. Schofield, David Tingle.
LAKE—Bergon F. Brokaw, J. Basil Hall.
LEE-HENDRY—James L. Bradley, Larry P. Garrett, H. Quillian Jones Sr., Edward W. Salko.
LEON-WAKULLA-JEFFERSON—E. G. Haskell, N. H. Kraeft, George N. Lewis, Robert N. Webster.
MADISON—(Absent—A. F. Harrison).
MANATEE—Irving Hall, Roger Meyer, Joseph Newhall.
MARION—Alex Goulard, Henry Harrell.
MONROE—Jaime M. Benavides.
NASSAU—(Absent—Cecil B. Brewton).
OKALOOSA—W. W. Thompson (Absent—Malcolm C. Crotzer).
ORANGE—Axel W. Anderson, Norman F. Coulter, Robert W. Curry, Joseph Flynn, Truett H. Frazier, Howard B. Goodrich, Paul C. Harding, David Hicks, Robert T. Hoover, Harold W. Johnson, Louis C. Murray, George A. Neder, Edward W. Stoner, Thomas B. Thames, Miles W. Thomley.
PALM BEACH—Carl E. Andrews, Vernon B. Astler, James R. Brandon, Jerry F. Cox, Maximilian A. Crispin, John J. Farrell, James R. Forlaw, Bernard Kimmel, Richard B. Moore Jr., H. John Richmond, L. Myrl Spivey, Governor M. Witt, Harold A. Yount.
PANHANDLE—William F. Brunner, James B. O'Connor.
PASCO-HERNANDO-CITRUS — James W. Basinger, Samuel R. Miller Jr.
PINELLAS—Joseph A. Ezzo, Allyn B. Giffin, Douglas W. Hood, David S. Hubbell, Charles A. Johnson, John T. Karaphillis, Charles H. Lasley, Jack A. MaCris, Donald G. Nikolaus, David T. Overbey, Thomas M. Quehl, George H. Welch Jr., Abbott Y. Wilcox Jr., Walter H. Winchester, Rowland E. Wood (Absent—James M. Stem, Richard C. Trump).
POLK—James R. Boulware II, J. Gerard Converse, Howard M. DuBose, Spencer R. Garrett, John W. Glotfelty, Willard E. Manry Jr., John H. Miller, John C. Moore Jr., Angelo P. Spoto Jr.
PUTNAM—(Absent—Roy E. Campbell).
ST. JOHNS—William W. O'Connell.
ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.
SANTA ROSA—(Absent—John P. Merchant).
SARASOTA—Irving A. Beychok, John M. Butcher, Samuel E. Kaplan, Franklin H. Pfeiffenberger, Karl R. Rolls, Millard B. White.
SEMINOLE—Fred Ionata, Luis Perez.
SUWANNEE-HAMILTON-LAFAYETTE — (Absent—Hugo F. Sotolongo).
TAYLOR—Bart Knight.
VOLUSIA—Bob Bullwinkel, Thomas D. Cook, James Demming, William H. Harrison Jr., George A. Thompson (Absent—Richard W. Snodgrass).
WALTON—(Absent—Howard F. Currie).
COUNCIL ON SPECIALTY MEDICINE—Frederick C. Andrews, James D. Beeson, Jack H. Bowen, Andre S. Capi, James W. Clower Jr., Emmet F. Ferguson Jr., John M. Hamilton, Joseph G. Matthews, William T. Mixson, Sanford A. Mullen, Edward J. Sullivan Jr. (Absent—West Bitzer, David W. Goddard, Samuel G. Hibbs, Robert E. Raborn, Richard G. Skinner Jr.).

DELEGATES TO AMA—Jere W. Annis, Francis T. Holland, Robert E. Zellner (Absent—Burns A. Dobbins Jr.).
PAST PRESIDENT AMA—(Absent—Edward R. Annis).
OFFICERS AND BOARD OF GOVERNORS—Henry J. Babers Jr., Jack Q. Cleveland, James T. Cook, James F. Cooney, William J. Dean, Charles K. Donegan, Richard M. Fleming, Floyd K. Hurt, Eugene G. Peek Jr., W. Dean Steward (Absent—Russell B. Carson, J. Maxey Dell Jr., Franklin J. Evans, William M. C. Wilhoit).
BOARD OF PAST PRESIDENTS—Samuel M. Day, H. Phillip Hampton, Walter C. Jones, John D. Milton, George S. Palmer, W. W. Quillian, W. C. Roberts, Leo M. Wachtel (Absent—Orion O. Feaster, F. K. Herpel, Ralph W. Jack, Edward Jelks, F. H. Langley, Duncan T. McEwan, Robert B. McIver, W. C. Payne Sr., Eugene G. Peek Sr., W. M. Rowlett, Joseph S. Stewart, W. C. Thomas Sr.).

The Speaker recognized distinguished guests from allied professions: Mrs. Doris Netzler, President, Florida Medical Assistants Association; Miss Marion E. McKenna, R.N., President, Florida Nurses Association; Mr. Sidney Simkowitz, President-Elect, Florida State Pharmaceutical Association; Dr. H. Larry Gore, Executive Secretary, Florida State Veterinary Medical Association; and Miss Eva Bacon, President, Licensed Practical Nurses Association of Florida.

Dr. Henry D. Perry, chairman of the Golf Tournament, announced the winners of the golf tournament: Low gross score, Dr. William M. C. Wilhoit; low net score, Dr. James Pringle.

Dr. Richard G. Connar, chairman of the Tennis Tournament, announced the winners of the tennis tournament.

The Speaker read telegrams from Dr. and Mrs. Burns Dobbins, and from Speaker of the Florida House of Representatives, Fred Schultz.

"Henry Babers, M.D.:

Hong Kong greetings and best wishes.

Please excuse our first absence.

Estelle and Dobbie."

"Dr. Henry Babers Jr.:

Regret legislative duties prevent my visiting with you and other friends in the FMA. Have discussed your program with Dr. Sanford Mullen, Harold Parham and Scottie Fraser. Assuring you of my wholehearted support, I remain sincerely,

Fred Schultz."

The Speaker announced that the Association's highest honor, the Certificate of Merit, would be presented to Dr. Francis T. Holland. He asked Dr. Nelson Kraeft and Dr. Jack Cleveland to escort Dr. Holland to the rostrum, and read the nomination.

Dr. Holland: "I would like to recognize my wife, without whose help I could not have done all I have done for you. Thank you."



Dr. Donegan presents the Certificate of Merit to Dr. Holland.

Certificate of Merit

Whereas, Francis Turner Holland, M.D., of Tallahassee, a prominent and respected member of the Florida Medical Association for more than three decades, has made outstanding contributions to the Association, the profession of medicine, the public, his community and country, and merits special recognition for his achievements, and

Whereas, This distinguished physician, born in Greenwood, South Carolina, on November 24, 1908, attended Union South Carolina High School at Union, South Carolina; received the Bachelor of Science degree in 1930 and Doctor of Medicine degree in 1933 from Emory University; completed an internship at Fitkin Hospital and undertook further specialized training at Cook County Graduate School of Medicine in Chicago, University of Pennsylvania Graduate School of Medicine in Philadelphia, University of Colorado School of Medicine in Denver, Harvard Graduate Medical School in Boston, and Tulane University School of Medicine in New Orleans, and

Whereas, This dedicated physician practiced general medicine in Tallahassee for several years prior to entering the United States Army Air Force on June 7, 1942, as a medical officer with the rank of first lieutenant; served more than three years in this country and as a flight surgeon with the Air Transport Command in England, the Gold Coast and Nigeria, West Africa, attaining the rank of captain, and

Whereas, This honorable physician resumed the private practice of medicine in Tallahassee specializing in general surgery following discharge from the United States Army Air Force on January 6, 1946, and

Whereas, This quietly efficient physician has been actively interested in organized medicine since 1937; served two terms as president of the Leon-Gadsden-Liberty-Wakulla-Jefferson County Medical Society; as member and chairman of numerous committees at county and state levels; as a member of the Board of Governors of Florida Medical Association; as a member of House of Delegates of American Medical Association, currently Chairman of the Florida Medical Association delegation; as Vice Councilor for the District of Florida, Southern Medical Association; as a member of the Southeastern Surgical Congress and United States Committee of World Medical Association; as a Fellow of American College of Surgeons, and Associate Fellow of International College of Surgeons, and

Whereas, This inquiring physician, concerned about the health of persons living in rural areas since his early days of medical practice, became a forerunner in activities which lead to cooperation of the medical profession and leaders in agriculture in the rural health movement; was instrumental in establishing the Florida Committee on Rural Health, serving as Chairman from 1956 to 1960 and currently is Chairman Emeritus; served as a member of the Council on Rural Health of the American Medical Association for ten years, becoming Chairman in 1969, and

Whereas, This energetic physician has been devoted to the delivery of medical care, serving as Chief of Staff, Chief of Surgical Service and member of Senior Surgical Staff of Tallahassee Memorial Hospital, and on the staff of the Florida A & M University Hospital, as consultant to Florida State University Infirmary, W. T. Edwards Hospital, and Jackson Hospital in Marianna; as Chairman of the Organization Committee of the Tumor Clinic in Tallahassee, as Director of the Clinic for its first five years, and as District Surgeon for Florida Crippled Children's Commission since 1950, and

Whereas, This prominent physician has used his influence for the betterment of his home community through participation in civic affairs; served as a member of the Board of Directors of Tallahassee Chamber of Commerce, and as a panel member of the U. S. Chamber Aircade in Jacksonville; therefore be it

RESOLVED, That the Certificate of Merit, the Florida Medical Association's highest honor, be presented to this considerate gentleman, eminent Association member, and dedicated community and professional leader in recognition of his unselfish and generous expenditure of time and effort throughout the years on behalf of the public, the profession and the Association.

The Speaker announced the presentation of the Certificate of Appreciation to Dr. Edward G. Haskell Jr., and asked Dr. Palmer and Dr. Webster to escort Dr. Haskell to the podium. He read the nomination.

Dr. Haskell: "I would like to recognize my wife and ask her to stand. She has done a lot during the years. This was probably given me by my colleagues for some of my dreams in legislative activities. It is a gratification to me that since I left the committee most of the things I envisioned have come to pass. You have the group in the legislature, you have the "Doctors of the Day." You have such people as George Palmer, Frank Holland, and Charlotte Maguire, concerned with health care. A lot more must be done in Tallahassee; Scotty Fraser is doing a fine job. It is a pleasure to have worked in this program in the past, and I will continue to do my part."

Certificate of Appreciation

Whereas, Edward G. Haskell Jr., M.D., a respected member of the Florida Medical Association for two decades, has made a significant contribution to the practice of medicine in this state and nation, to the Association and to the health and well-being of the people and merits special recognition for his achievements, and

Whereas, This active physician, born in Jacksonville in 1922, was educated in local schools, the Citadel at Charleston, S. C., and in 1946 received the Doctor of Medicine degree from Duke University School of Medicine, and

Whereas, This loyal physician completed a two year surgical residency at the U. S. Naval Hospital in Long Beach, Calif., and subsequently served one and a half years aboard the USS Mount McKinley, and

Whereas, This concerned physician began the private practice of medicine at Branford in 1950, attended to the needs of patients from an extensive rural area for more than eight years and at the same time actively participated in the Suwannee-Hamilton-Lafayette County Medical Society serving as president and as a delegate to the Florida Medical Association, and



Dr. Donegan presents the Certificate of Appreciation to Dr. Haskell.

Whereas, Due to changing trends in rural practice, this dedicated physician moved to Tallahassee in 1959 so that his patients might have the benefits of an urban medical center and continued his interests in organized medicine, and

Whereas, This sincere physician, strongly believing that the strength and future of medicine would be decided to a large extent in the political arena, served as chairman of the Committees on Legislation for the Leon-Wakulla-Jefferson County Medical Society, Florida Academy of General Practice and Florida Medical Association, as a member of the Association's Committee on National Legislation and of the executive committee of Florida Medical Political Action Committee, and

Whereas, This considerate physician, was instrumental in establishing a medical dispensary in the capitol building at Tallahassee and has come to be known affectionately as the "Legislative Doctor" in management of the clinic, and

Whereas, This dedicated physician also served as president of the Florida Academy of General Practice, secretary-treasurer of the Leon-Wakulla-Jefferson County Medical Society, member of subcommittee on Individual Responsibility Program of Florida Medical Association, and as a member of the Governor's Committee on Health and Welfare, and

Whereas, This civic minded physician served as president of Florida State University Seminole Boosters and as a director for ten years, as director of Florida Sheriffs Boy's Ranch, as chairman of the committee to provide medical personnel for the ranch clinic, as an assistant scout master, director of Leon County United Fund, as a Rotarian and active member of Trinity Methodist Church; therefore be it

RESOLVED, That this Certificate of Appreciation, established in 1961 for the purpose of acknowledging exceptionally meritorious service and awarded now for the fifth time, be presented to this outstanding member of the Florida Medical Association in recognition of his many contributions to the people of this state and nation and to the profession of medicine.

The Vice Speaker asked the House to recognize Mr. Donald Fraser, manager of the Association's new Capitol office.

Dr. Evans: Vice Speaker, stated that due to the undercurrent that the vote was taken on the Board of Governor's recommendation concerning Resolution 69-29, Hospital Medical Staffs, because of the fixed deadline for recess, the Chair will entertain a motion to reconsider this subject.

Dr. Yount: "I move that this Resolution 69-29 be reconsidered."

The motion was seconded.

The motion to reconsider was defeated.

Continuation of

Report of Reference Committee No. IV

Legislation and Miscellaneous

Board Action No. 15. Legislative Activities

Dr. Coleman: "Your Reference Committee heard testimony from several witnesses on this action of the Board of Governors. This testimony brought out some of the problems that have been encountered in the past when specialty groups undertook individual legislative action.

"Your Reference Committee, therefore, recommends adoption of Board Action No. 15 with one amendment—that the word 'program' in line 53 be changed to 'council.'"

Motion carried. (See report of Board of Governors, page 48).

Board Action No. 20. Procedures and Policies

"Your Reference Committee was advised that the procedures and policies for the Council on Legislation and Public Agencies as adopted by the Board of Governors are now operative and that they are working satisfactorily.

"Your Reference Committee therefore recommends adoption of Board Action No. 20."

Motion carried. (See report of Board of Governors, page 48).

Board Action No. 26. Title XIX—Medicaid

"Your Reference Committee heard much testimony on Title XIX (Medicaid), as it is currently being implemented in Florida. We were informed that the physicians designated to advise the Department of Health and Rehabilitative Services on Title XIX have not yet been officially appointed by the department. Your Reference Committee was further advised that there is little likelihood of adequate funding for Title XIX by the current Florida Legislature. Concern was expressed in further testimony regarding the necessity of accepting assignments under Title XIX.

"Your Reference Committee is in sympathy with Board Action No. 26 with the addition of the following statement:

'That the Board of Governors continue their efforts:

'1. To obtain official appointment by the Department of Health and Rehabilitative Services of the physicians nominated to advise it;

'2. To obtain adequate funding for the Title XIX program;

'3. To change the federal regulations so as to permit the physician a freedom of choice with respect to accepting assignments.'

"Your Reference Committee recommends the adoption of Board Action No. 26 as amended."

Motion carried. (See report of Board of Governors, page 48).

Board Action No. 28
Board of Medical Examiners

"Your Reference Committee was advised that $350,000 is currently held in the trust fund for the State Board of Medical Examiners, but that the budget as recommended by the Governor, which is being considered by the Appropriations Committee of the House of Representatives and the Ways and Means Committee of the Senate is substantially below the request of the Board of Medical Examiners for the coming year.

"Your Reference Committee, therefore, recommends that Board Action No. 28 be adopted and that the Board of Governors be urged to continue its efforts to obtain an adequate budget for the State Board of Medical Examiners."

Motion carried. (See report of Board of Governors, page 49).

Board Action No. 29
Allied Health Personnel

"This action dealing with Allied Health Personnel was considered and your Reference Committee heard only favorable testimony for this Board action. Your Reference Committee therefore recommends that Board Action No. 29 be adopted."

Motion carried. (See report of Board of Governors, page 49).

Recommendation No. 3. Medical Practice Act

"Your Reference Committee heard testimony indicating that registered nurse midwives should be added to the group of physician assistants, registered nurses and licensed practical nurses in

the amendment that would be offered to the Medical Practice Act.

"Your Reference Committee therefore recommends adoption of Recommendation No. 3 with the addition in line 41 after 'a registered nurse,' the words—'a registered nurse midwife (nurse obstetric associate)' so that the recommendation will read:

> '3. Medical Practice Act—The Board of Governors recommends to the House of Delegates that the following addition be made to the Medical Practice Act: 'Nothing in this article shall be so construed as to prohibit service rendered by a physician's trained assistant, a registered nurse, a registered nurse midwife (nurse obstetric associate), or a licensed practical nurse if such service be rendered under the responsible supervision and control of a licensed physician.' "

Motion carried. (See report of Board of Governors, page 49).

Resolution 70-2
Air and Water Pollution Legislation
Lee-Hendry County Medical Society

Resolution 70-25
Air and Water Pollution
Palm Beach County Medical Society

"Since Resolution 70-2, Air and Water Pollution Legislation, by the Lee-Hendry County Medical Society, and Resolution 70-25, Air and Water Pollution, by the Palm Beach County Medical Society, both dealt with essentially the same subject, they were considered together.

"Testimony was presented which indicated that legislation which would achieve the objectives set forth in these two resolutions is currently pending in the Florida Legislature.

"Your Reference Committee recommends that Resolution 70-2 and Resolution 70-25 be adopted."

Motion carried.

Resolution 70-2

Air and Water Pollution Legislation

Whereas, It is evident that in this state, country and throughout the world, the problem of air and water pollution is rapidly becoming the most critical facing the human race and,

Whereas, Through this portal mankind may face extinction in the near future and,

Whereas, Even at the present time the continued pollution of the earth's air and water is deleterious to the health and well being of all living organisms, and,

Whereas, The Florida Medical Association is primarily concerned with the health of the people of this state, nation and throughout the world, be it therefore

RESOLVED, That the Florida Medical Association exert whatever influence it might muster to urge immediate action by the legislative bodies of this state to establish laws governing pollution of the air and water throughout the state, and that sufficient financial support be supplied to insure adequate enforcement of these laws, be it further

RESOLVED, That the Florida Medical Association impress upon the members of these legislative bodies the urgency of this need and the lethal consequences that will surely result from continued neglect of proper legislative action.

Resolution 70-25

Air and Water Pollution

Whereas, The hazards of air and water pollution are of great national concern and

Whereas, The physicians of this great state should actively strive to correct factors in their country contributing to air and water pollution, realizing that this pollution encourages illness in the community. Therefore be it

RESOLVED, That the Florida Medical Association actively support and encourage attempts by physicians to correct local and state-wide environmental health hazards.

Resolution 70-8
Chiropractic
Alachua County Medical Society

"Resolution 70-8 Chiropractic, submitted by the Alachua County Medical Society, recommends that the Florida Medical Association support dissemination of the information contained in the report submitted by the Secretary of Health, Education and Welfare to the Congress of the United States on December 28, 1969, regarding Chiropractic. It also recommends legislation denying future new licensure to practitioners of chiropractic. Testimony before your Reference Committee indicated that chances of obtaining legislation which would deny licensure to practitioners of chiropractic in the future are very remote.

"Testimony in support of continuing public dissemination of information about chiropractic was favorable.

"Your Reference Committee therefore recommends that Resolution 70-8 be approved with the deletion of the second recommendation (lines 4-5 on the second page)."

Dr. Singleton: "I would like to add an amendment to the Reference Committee's recommendation: Rather than remove the second recommendation, substitute for it: "and Resolved, the FMA consider legislation denying future licensure to new practitioners of chiropractic," thereby not insisting that we have this legislation, but allowing the Board of Governors and the legislative committee to consider it." The amendment was seconded.

The amendment carried.

The recommendation of the Reference Committee carried as amended.

Resolution 70-8

Chiropractic

Whereas, on December 28, 1968, the Secretary of the Department of Health, Education, and Welfare delivered to the U. S. Congress a complete report regarding chiropractic which can serve as a guideline to other legislative bodies concerned with regulation of chiropractic practice, and

Whereas, the conclusions of this report are as follows:

"1. There is a body of basic scientific knowledge related to health, disease, and health care. Chiropractic practitioners ignore or take exception to much of this knowledge despite the fact that they have not undertaken adequate scientific research.

2. There is no valid evidence that subluxation, if it exists, is a significant factor in disease processes. Therefore, the broad application to health care of a diagnostic procedure such as spinal analysis and a treatment procedure such as spinal adjustment is not justified.

3. The inadequacies of chiropractic education, coupled with a theory that de-emphasizes proven causative factors in disease processes, proven methods of treatment, and differential diagnosis, make it unlikely that a chiropractor can make an adequate diagnosis and know the appropriate treatment, and subsequently provide the indicated treatment or refer the patient. Lack of these capabilities in independent practitioners is undesirable because: appropriate treatment might be interrupted or stopped completely; the treatment offered could be contraindicated; all treatments have some risk involved with their administration, and inappropriate treatment exposes the patient to this risk unnecessarily.

4. Manipulation (including chiropractic manipulation) may be of valuable technique for relief of pain due to loss of mobility of joints. Research in this area is inadequate; therefore, it is suggested that research that is based upon the scientific method be undertaken with respect to manipulation," and

Whereas, the recommendation of the report is as follows:

"Chiropractic theory and practice are not based upon the body of basic knowledge related to health, disease, and health care that has been widely accepted by the scientific community. Moreover, irrespective of its theory, the scope and quality of chiropractic education do not prepare the practitioner to make an adequate diagnosis and provide appropriate treatment. Therefore, it is recommended that chiropractic service not be covered in the Medicare program."

RESOLVED, 1.) That the Florida Medical Association supports: Public dissemination of the findings of this report;

2.) That the FMA consider legislation denying future licensure to new practitioners of chiropractic.

Resolution 70-9

Commending the Efforts of One Marjorie Shearon for the Welfare of Physicians Throughout the United States

William C. Roberts, Delegate

NOT ADOPTED

"This resolution was submitted by William C. Roberts, M.D., as an individual. It would instruct the delegates from the Florida Medical Association to the House of Delegates of American Medical Association to introduce a resolution which would ask the AMA House of Delegates to advocate an annual stipend for life of $5,000 for Marjorie Shearon in recognition of her outstanding contributions in the fight against socialism in this country.

"Although your Reference Committee is aware of these contributions which were of great importance for many years in providing opponents of socialism with vital and useful information, your Reference Committee is also aware that the Board of Trustees of the American Medical Association considered this proposal and for legal and other reasons found it not feasible.

"Your Reference Committee therefore recommends that this House of Delegates again take note of Mrs. Shearon's outstanding work and it further recommends for reasons given above that Resolution 70-9 not be adopted."

Motion carried, and Resolution 70-9 was not adopted.

Resolution 70-24
Drug Control Legislation

Dade County Medical Association

"This resolution was introduced by the Dade County Medical Association. Testimony before the Reference Committee indicated that this resolution is consistent with the legislative program of the American Medical Association in supporting the Hughes Bill transferring responsibility for control of psychotropic drugs from the Justice Department to the Department of Health, Education and Welfare.

"Your Reference Committee therefore recommends adoption of Resolution 70-24."

Motion carried.

Resolution 70-24

Drug Control Legislation

Whereas, The Senate of the United States passed a Drug Control Bill in January of 1970 which primarily designated the Department of Justice as the overseer, controller, adjudicator, investigator and prosecutor of psychotropic drugs, and

Whereas, The appraisal and research of designated drugs would come under the aegis of a non-scientifically oriented body, be it therefore

RESOLVED, That the Florida Medical Association opposes such potentially pernicious and dangerous legislation, and further

RESOLVED, That the Congress of the United States instead consider and act favorably upon the Hughes Bill, which would delegate drug use and abuse, research and

education, to the Department of Health, Education and Welfare, and be it further

RESOLVED, That the American Medical Association delegates from the Florida Medical Association support the American Medical Association, already strongly committed to the worthiness and urgency of this resolution.

Resolution 70-35
Registration Fee—Board of Medical Examiners
Dade County Medical Association

NOT ADOPTED

"On this resolution introduced by the Dade County Medical Association, your Reference Committee heard testimony from Dr. George Palmer, Executive Director of the State Board of Medical Examiners, which indicated that implementation of this resolution would result in all physicians who refused to pay their registration fee having their license to practice suspended, since payment of the registration fee is a legal requirement in Florida.

"Your Reference Committee in considering the need for an adequate budget for the State Board of Medical Examiners recommended approval of the Board of Governors action No. 28.

"Your Reference Committee therefore recommends that Resolution 70-35 not be adopted."

Motion carried, and Resolution 70-35 was not adopted.

Resolution 70-36
Board of Medical Examiners
Dade County Medical Association

NOT ADOPTED

"This resolution was introduced by the Dade County Medical Association. This calls for an investigation of programs in other states where separate boards for the enforcement of the Medical Practice Act have been created, thus separating the licensing and enforcement functions of the State Board of Medical Examiners into two separate boards.

"Testimony before your Reference Committee indicated that with adequate funding the State Board of Medical Examiners in Florida can satisfactorily carry out both of these functions.

"Your Reference Committee therefore recommends that Resolution 70-36 not be adopted."

Motion carried, and Resolution 70-36 was not adopted.

"The Chairman would like to express appreciation to the many members of the Florida Medical Association who attended our meeting and patiently waited for the particular item on which they wished to speak and for the wealth of information and wisdom which they added to the committee's deliberations.

"The Chairman also thanks the members of the Reference Committee, who were all in attendance, and who were so painstaking and conscientious in compiling this report. My sincere appreciation to Drs. Karl B. Hanson, Ray E. Murphy Jr., Rufus K. Broadaway, Robert N. Webster, the committee members, and to Dr. Robert E. Zellner, our AMA Delegate, who assisted us in an advisory capacity. Mrs. Mae Mason's assistance in recording and serving so ably as our secretary is also appreciated.

"This completes the report of Reference Committee IV-Legislation and Miscellaneous."



House of Delegates in session. (From left) Dr. Floyd K. Hurt, Secretary-Treasurer, Mr. W. Harold Parham, Executive Vice President, Dr. Charles K. Donegan, Speaker of the House, Dr. Henry J. Babers, President, Dr. Franklin J. Evans, Vice Speaker, Dr. James T. Cook, President-Elect and Dr. Jack Q. Cleveland, Immediate Past President.

Report of Reference Committee No. V
Medical Economics

Dr. Thad Moseley, chairman, presented the report of Reference Committee No. V, Medical Economics.

Dr. Moseley: "Mr. Speaker, Mr. President and Members of the House of Delegates: The Committee spent from 9:30 a.m. until 1:15 p.m. in hearing all those who desired to be heard on matters referred to Reference Committee No. V in the Handbook and the added resolutions. The Committee's recommendation on each item will be submitted separately, and we request that each item be acted upon separately before proceeding to the next item."

Council on Medical Economics

"Your Committee recommends acceptance of the report of the Council on Medical Economics; however, your Committee questions the reason for the Committee on Members Insurance (p. 70) not meeting for a full year on a subject as important as insurance and requests that this be filed as information.

"Your Committee considered the subject of travel insurance coverage for members who are private pilots and recommends that private pilot participation in our present insurance coverage be referred to the Board for (study)."

Dr. Edward Stoner, Orange: "I move to delete the word 'study' from the reference committee's recommendation and substitute the word 'implementation.'" The amendment was seconded.

Dr. Stoner: "This has been referred to the Board year after year. This particular policy covers the riding of a passenger piloted by a licensed pilot, but does not cover the insurance for the pilot, who may be a member. This inequity has been brought to the Board of Governors year after year and nothing was done about it. For general information, the safety record of general aviation is similar to, if not slightly better than, the airlines. Based on fatalities per 100 hours flown, general aviation is 5.7 in contrast to 6.1 for the airlines, despite the fact that general aviation includes the hazards of industrial and agricultural flying. Many life insurance companies have removed the additional rider for private pilots without additional premium."

The amendment to the reference committee's recommendation carried.

The motion, as amended, carried.

Council on Medical Economics

JACK A. MACRIS, *Chairman*

The Council met twice during the year at which time committee reports with recommendations were presented and acted upon. The committees' recommendations were submitted through the Council on Medical Economics for final action by the Board of Governors.

During the past year the committees under the Council were extremely active in the following areas:

1. Revision and updating of FMA Relative Value Studies manual.
2. Preparation of proposed model medical staff bylaws with rules and regulations.
3. Review of individual physicians' problems relating to members' insurance, with special interest directed toward the FMA professional liability insurance plan.
4. Review of Blue Shield administrative policies and methods used in determining reimbursement of physicians for services rendered under the various Blue Shield contracts.
5. Continued liaison has been maintained with the health insurance industry and indications are that, in areas where needed, insurance review committees are functioning as intended.

Committee on Advisory to Blue Shield & Fiscal Intermediaries.—The Committee on Advisory to Blue Shield and Fiscal Intermediaries met twice during the past year and submitted recommendations through the Council on Medical Economics to the Board of Governors for final action.

The committee continues to be very much concerned regarding Blue Shield administrative policies relating to reimbursement of physicians for services rendered under the various private, nongovernmental and governmental programs and, in doing so, has devoted specific attention toward improving physician confidence in Blue Shield by directing indepth consideration to the following areas of concern:

1. Study the equity and validity of the current method of determining allowable fees for Medicare patients.
2. Study the Florida Medical Foundation letter of agreement with Blue Shield and the operation of the peer utilization system under that agreement, and
3. Make a study of the form letters and other correspondence coming from Blue Shield.

The objectives of looking into these areas are intended to accomplish the following:

1. Restore and improve FMA membership confidence in the administration of the Blue Shield Board of Directors and Blue Shield operations.
2. Seek to improve or change in attitude of claims examiners, file clerks, etc.—especially regarding physician correspondence.
3. Seek clarification of the manner and approach whereby appropriate means can be established to permit a physician to revise his fee profile.
4. Review indepth methods used by Blue Shield in validation of fee determinations.

Committee on Hospitals & Extended Care Facilities.—The committee was extremely active during the year.

The chairman attended the joint meeting with the Florida Hospital Association. The chairman attended two Chicago meetings of the JCAH representing the FMA with regard to revision of accreditation standards for hospitals in the United States. The chairman attended the Gainesville meeting with trustees and hospital administrators sponsored by the FHA and spoke briefly following Dr. Bahers timely remarks. The chairman wrote the model bylaws and rules and regulations which are presently under review by FMA and forwarded the charter and incorporation papers of model type for use in this state.

RECOMMENDATIONS

It is strongly recommended that:

1. All hospital medical staffs in the state of Florida review their bylaws and bring them up to date and make certain that they are properly acknowledged and signed by the board of governors or trustees of their hospitals. In this way they become a part of the hospital bylaws and this is the only way in which they become legally enforceable for the protection of various members of the medical staff.

2. Continue close liaison with FHA and communicate with them. Much of our past difficulty has resulted primarily from lack of communication.

3. Work toward the inclusion of one or more physicians on all hospital governing boards in the state and work to eliminate the remaining few hospitals which specifically prohibit physician membership on the boards since this has been clearly shown to be unconstitutional.

Note: This is an interesting and extremely active committee. Since medicine is being practiced more and more from the hospital base, the obvious importance and increasing magnitude of this committee work will be understood. Since certain forces would hope to control more and more of the free enterprise medical force through the hospitals, it is essential that Florida medicine remain strong in our hospitals and cooperate with those who can work with us and help us in this field.

Committee on Relative Value Studies.— In accordance with a directive of the Board of Governors approved by the 1969 House of Delegates, the committee has worked throughout the year to develop a complex survey project for collecting confidential data on fee structures among all private Florida physicians. Dr. William M. Howard, Inc., an actuary-statistician of Gainesville, has been working under an FMA contract assisting and advising the committee in this project. This data will be used to determine a new schedule of relativity based on Florida fee levels. All previous Relative Value Manuals have been based primarily on California Relative Value Manual figures. Questionnaires on fees for common services and procedures have been compiled for all of the medical specialties and interests.

As a pilot study, these questionnaires were submitted to the private physicians of Orange County in late January 1970. Data from the Orange County survey is being analyzed now and will be used to make necessary changes and corrections before sending the questionnaires in their final form to the other physicians of Florida on or before April 1. It is anticipated that a new Relative Value Studies manual based on customary fees charged in Florida will be available in 1970.

A new coding and nomenclature developed by the California Committee on Relative Value Studies and endorsed by AMA has been used in the surveys. This will provide for the first time a highly useful nationwide system of nomenclature and coding for medical procedures and services.

RECOMMENDATIONS

1. That continuing endorsement be given the Relative Value Studies Committee project to develop a new Relative Value manual based on fee relativity in Florida.

2. That the Relative Value Studies Committee continue to study procedures allowing frequent revision and updating of manuals.

Committee on Members Insurance.—Although the full committee has not met during the past year, the chairman has been actively involved regarding the Association-sponsored insurance programs. In addition to reviewing and offering advice regarding the membership benefit programs, your chairman has devoted attention to individual physician's problems relating to professional liability insurance coverage. It is a recognized interest to the medical profession that physicians are now placed in the untenable position of having to have professional liability insurance protection in order to conduct their professional practice without fear of total economic loss. Your chairman wishes to emphasize the necessity for having a critical analysis of all FMA insurance programs, and especially the professional liability program.

In addition to seeking passage of legislation relating to claims and suits against physicians, it is appropriate that an active and close liaison be established with the Department of Insurance and the Insurance Commissioner in order that rate filings made by carriers are made available to effected insureds and are justifiably substantiated by valid statistical loss experience.

Committee on Health Insurance.— The Committee on Health Insurance has not met during the year; however, the chairman has attended the Council meetings and is pleased to report that local insurance review committees are apparently functioning as intended and that the state committee continues to offer assistance when called upon. During the coming year the committee will direct attention to continuation of the Individual Responsibility Program as was assigned to the committee by the Council.



Reference Committee V personnel were Drs. Thad Moseley (Chairman), Douglas W. Hood, Robert L. Andreae, William M. Straight, Earl G. Wolf and Samuel M. Day, AMA Delegate (not shown). Mrs. Arlene Cassens was recording secretary.

Report of Board of Governors

Action No. 2. Workmen's Compensation
Action No. 3. Relative Value Studies
Action No. 4. Peer Medical Utilization Review
Action No. 6. Members Insurance Trust
Action No. 23. Extended Care Facilities
Action No. 27. Professional Liability
Action No. 30. Deferred Compensation

"These actions were approved as presented, and your Committee recommends the adoption of these reports of the Board of Governors."

Motion carried. (See report of Board of Governors, pages 47-49).

Action No. 19
Proposed Regulation for Hospital Licensure

"Your Committee recommends adoption of this report with the following correction: In line 18, change 'for' to 'from' and in line 19, change 'for' to 'from' which makes this report now read:

> "Proposed Regulation for Hospital Licensure. —The Board of Governors recommended to the Division of Health that a section be included in the regulations for licensure of hospitals, providing that hospitals shall furnish a statement from the State Board of Medical Examiners (and, in the case of osteopathic hospitals, from the osteopathic examining board) certifying that physicians responsible for patient care are in compliance with the pertinent laws on the practice of medicine, and that arrangements between the administration and the physicians providing care for patients in the hospital are such as to permit the practice of medicine without any improper influence, direction or impediment."

Motion carried. (See report of Board of Governors, page 48).

Resolution 70-3

Blue Shield Payment Schedules as Percentage of Usual and Customary Fees

Duval County Medical Society

Your Committee recommends approval of this resolution with the deletion of the "Resolved" and the following "Resolved" substituted:

> "RESOLVED, That the House of Delegates of the Florida Medical Association request Blue Shield to print in bold type on each and every policy which does not pay the physicians' "usual and customary" fee that "this policy does not necessarily cover the physician's entire fee."

Dr. Ferguson: "We like what the Reference Committee did to this resolution, but don't think they went far enough. We would like to add to the resolution a second resolved: "Resolved, That the Florida Medical Association instruct Blue Shield of Florida to work toward changes in the payment schedule to a percentage of usual and customary fees, which would vary for each class or type of policy sold by Blue Shield, and to request that Blue Shield clearly inform each purchaser of the policy limitations." The amendment was seconded.

Dr. Ferguson: "We are not asking them to put down a certain percentage. We only want them to work toward this. If we don't get it in for them to start working on, we are never going to get it."

Dr. Billy Brashear, Alachua: "If this is all put on a percentage basis, those of us who sometimes accept Blue Shield payment as full fee, what percentage do we take?"

Dr. Ferguson: "We are not putting any figure on it. We just want a resolution to finally get a truth in advertising in Blue Shield-Blue Cross. Too often the patient is charged more than Blue Shield will pay, and he thinks the physician is overcharging. We want him to know that this is not so."

Dr. Straight spoke as a member of the reference committee in order to clarify the reference committee's thinking in making the recommendation it did.

The amendment to the resolution carried.

The Resolution 70-3 was approved, as amended.

Resolution 70-3

Blue Shield Payment Schedules as Percentage of Usual and Customary Fees

Whereas, By multiple previous action and by resolution passed by the Florida Medical Association House of Delegates in May, 1966 stating all fees should be usual and customary from any government or quasi-government agency, and

Whereas, Efforts have been made in the past to establish usual and customary levels of fees, and

Whereas, In the past Blue Shield fee allowances have been misunderstood by many as representing physicians' routine fees, and

Whereas, Many purchasers of Blue Shield policies feel that they are fully covered for physician fees by these low allowance policies, and

Whereas, Blue Shield cannot, in fact, set physician fees, therefore be it

"RESOLVED, That the House of Delegates of the Florida Medical Association request Blue Shield to print in bold type on each and every policy which does not pay the physicians' "usual and customary"

fee that "this policy does not necessarily cover the physician's entire fee."

RESOLVED, That the Florida Medical Association instruct Blue Shield of Florida to work toward changes in the payment schedule to a percentage of usual and customary fees, which would vary for each class or type of policy sold by Blue Shield, and to request that Blue Shield clearly inform each purchaser of the policy limitations.

Resolution 70-10

Blue Cross-Blue Shield and Government Programs

Sarasota County Medical Society

"Your Committee recommends that this resolution be considered point by point and be voted upon point by point.

"Your Committee recommends that Lines 7 through 44 be deleted and the following "Whereas" be substituted:

> "Whereas, on December 11, 1969, a meeting was held between the officers of Blue Shield and the Insurance Committee of the Sarasota County Medical Society, during which it became apparent to the Sarasota County Medical Society that Blue Shield did not consistently act in the physicians' best interest, therefore be it."
> Motion carried.

Your Committee recommends that Lines 45 through 51 be deleted and the following "Resolved" be substituted:

> "RESOLVED, That Blue Shield be requested, insofar as possible, to issue contracts which permit the physician to bill independently, free of assignment, and free of any contractual arrangement between Blue Shield and a third party, and that any existing contracts which require assignment on the part of the physician be reviewed in the same context on the expiration of such contract."

Dr. William Mixson, Council on Specialty Medicine: "I would like to propose an amendment to the Reference Committee's substitute "Resolved": "That Blue Shield write no contracts that do not incorporate the concept of individual responsibility (example, no service limit, full fee, usual and customary plan recently offered) which do not allow the physician to bill independently or that require assignment; and that existing contracts which do not comply with the above to be terminated on the expiration of said contract or prior to expiration where possible; and that the Board of Governors of FMA withdraw the offering to its members by Blue Shield a full fee usual and customary plan of coverage." The amendment was seconded.

Dr. Mixson: "Blue Shield has begun to write a no-service-limit, full-fee contract at usual and customary rates. This means that the physician agrees to accept the payment as full fee. FMA is in a contradictory position, supporting individual responsibility on the one hand, and on the other supporting a contract that gives a third party full responsibility. I am opposed to this plan for several reasons: The difficulty in establishing fair, usual and customary fee rates; the fact that this kind of insurance drives up the cost of medicine tremendously, where the patient does not participate in the cost; the loss of individual responsibility and its inherent disturbance of the patient physician relationship; this plan, which will raise the cost of medicine, is supported by the participating physicians, and so the rising cost can be blamed directly on the physicians. I am opposed to the manner in which we were informed of this plan by Blue Shield. It was a form letter, stated that Blue Shield must be notified if you did not want to participate. Therefore, most of us are participants by default, without really knowing it. It is said this kind of thing is inevitable; this may be, and will certainly be if we accept it instead of standing up against it."

Dr. Zellner: "I am chairman of new contracts for Blue Shield. We would welcome Dr. Mixson's presence and comments. As of now, Blue Shield does not have a single contract which requires assignment; it does not have a single contract in which the doctor doesn't have the option to charge what he pleases except where he has voluntarily become a participating physician. In every instance, where you have accepted assignment which lets them pay you directly, you have signed a participating physician's agreement. By direction of this House of Delegates last year, we came up with this usual and customary contract. This is what doctors have been asking for for years. The criticism that a doctor doesn't read his own mail certainly cannot be laid at Blue Shield's door. If for every contract Blue Shield puts out you had to go out and get individual participating physicians contract signed, it would take months. This was the only way this could be done. Any doctor who does not wish to participate in this, can write in now and withdraw his name. Often Medicare is confused with Blue Shield. Blue Shield is fiscal agent for Medicare; it is not a Blue Shield contract. There is nothing the Blue Shield Board can do about the provisions of Medicare, but it can and does control its own contracts."

Dr. Beychok: "I would like to say that Dr. Thad Moseley conducted the reference committee meeting in an extremely fair and efficient manner. I would like to say in support of Dr. Mixson's motion, we came to the reference committee with a long and involved resolution; the committee has totally emasculated the resolution by their changes. Recognizing the tenor of this meeting, Sarasota County is not going to attach every change. We are simply supporting the resolution of Dr. Mixson. But for us to encourage Blue Shield to grant a single contract in which you as a participating physician agree that a given fee is a total fee is extremely dangerous."

Dr. Lewis: "Being a participating physician is a two-way street. What has been proposed as an amendment will obviate Blue Shield and Blue Cross from extending this type of policy across the state."

Dr. Samuel Day, Past President, Duval: "In opposition to the amendment, we have been asking for usual and customary for years. Unless we give people some assurance that this usual and customary will be accepted by physicians—and its usually a fair fee—you can't sell such a contract."

Dr. Jack MaCris, Pinellas: "With this type of contract, we are establishing, voluntarily, a national fee schedule which we are willing to live with. It will be immediately adopted and used against us."

Dr. James Cook, President-Elect: "I think there are two propositions contained in this, and I would like to request the Chair to divide the question. One concerns the issuing of new contracts, and the other is asking the House to reverse itself on usual and customary contracts."

The amendment was divided, and a vote taken on the first part concerning not issuing any new contracts. This portion of the amendment failed to carry.

The vote was taken on the second part, concerning the position with regard to usual and customary contracts, and this portion of the amendment failed to carry.

The original recommendation of the Reference Committee carried.

Dr. Moseley: "Your Committee recommends deletion of Lines 52 through 54 and the following "Resolved" be substituted:

> "RESOLVED, That the House of Delegates urge the implementation of the Report of the Council on Medical Economics, page 68, item 3, lines 16 and 17, and that Blue Shield be instructed to respond promptly, specifically and completely to requests for information by participating physicians and to be constantly alert to avoid disparaging the physicians' image in the public eye."

Motion carried.

"Your Committee recommends deletion of Line 55, page 1, and Lines 1 and 2, page 2. The reason we recommend deletion of this is that Dr. Warren Quillian has appointed a committee, composed of Dr. Henry Babers, chairman, and Dr. Robert Zellner and Dr. Leo Wachtel, to study this problem and recommend and implement changes in the operation of Blue Shield."

Motion carried.

"Your Committee recommends deletion of Lines 3 through 7. This deletion is being recommended following the hearing of information at the committee meeting, which seemed to prove that Blue Cross and Blue Shield together gives a broader base of operation."

Motion carried.

"Your Committee recommends deletion of Lines 11, 12 and 13 and acceptance of Lines 8, 9 and 10."

Motion carried.

"Your Committee recommends deletion of Lines 14, 15 and 16 and believes that this should properly be information available to peer review committees of county medical societies, as it basically involves a comparison of any individual physician with those of his associates in the community."

Motion carried.

"Your Committee recommends deletion of Lines 17 through 21 and substitution of the following "Resolved":

> "RESOLVED, That Blue Shield be instructed upon request to continually forward promptly all new and pertinent information and directives to appropriate member or members of individual county medical societies."

Motion carried.

The Resolution 70-10, as amended, was adopted.

Resolution 70-10

Blue Cross-Blue Shield and Government Programs

Whereas, on December 11, 1969, a meeting was held between the officers of Blue Shield and the Insurance Committee of the Sarasota County Medical Society, during which it became apparent to the Sarasota County Medical Society that Blue Shield did not consistently act in the physicians' best interest, therefore be it

RESOLVED, That Blue Shield be requested, insofar as possible, to issue contracts which permit the physician to bill independently, free of assignment, and free of any contractual arrangement between Blue Shield and a third party, and that any existing contracts which require assignment on the part of the physician be reviewed in the same context on the expiration of such contract, and be it further

RESOLVED, That the House of Delegates urge the implementation of the report of the Council on Medical Economics, page 68, item 3, lines 16 and 17, and that Blue Shield be instructed to respond promptly, specifically and completely to requests for information by participating physicians and to be constantly alert to avoid disparaging the physicians' image in the public eye, and be it further

RESOLVED, That Blue Shield establish a simplified system of entering into a physician's profile unusually high or low fees so as not to disproportionately affect said individual's profile, and be it further

RESOLVED, That Blue Shield be instructed upon request to continually forward promptly all new and pertinent information and directives to appropriate member or members of individual county medical societies.

Resolution 70-14
Relative Value Guide

John A. Rush Jr., Delegate

"Your Committee recommends disapproval of this resolution. This judgment is based upon information from the Committee on Relative Value Studies that a survey is being done, has been the method of choice of the Florida Medical Association and would be redundant in light of present policies of FMA."

Dr. Gerard Converse, Polk: "I oppose the action of the reference committee, based on the fact that they apparently had a misconception of the resolution. The Relative Value Guide method of arriving at fees is an accepted concept. The sense of the resolution was based on the fact that the usual and customary fee as we now face it is becoming a 'sacred cow' with which we are going to be crucified by the federal government, as they slowly force us into a method of accepting payment with which we will have very little to say. This says we should use the relative value system as a vehicle for fiscal negotiation with the government. Usual and customary may be used against us because there are other little factors involved, such as the terms prevailing and reasonable. The only part the doctor is sure of is the usual part; the other modifiers are determined by his community, what insurance pays, and the reasonable will come from possibly the people as what they are willing to pay. I believe the federal government will be receptive to our using a relative value method as a fiscal vehicle for future negotiations. It is a method we all understand and is above the table. We would rather deal with a 'fee schedule' in which we know all the factors than with a usual and customary which we do not know and will never know."

Dr. Beychok: "I urged the reference committee not to adopt this resolution, for the same reasons given by the previous speaker. The wording of this resolution would have nailed us to the wall. This resolution translated 'guide' into 'fee' and so poorly brought out that one couldn't support it. We would be saying we are willing to accept a relative value number times a given factor as our absolute payment."

Dr. Rush: "I move to refer this resolution to the Board of Governors, rather than disapprove it. If we disapprove it firmly at this point, we may cut off future avenues we may want. By referring, we at least keep these open for study and do not commit ourselves to any particular methodology."

Motion to refer carried.

Resolution 70-14

Relative Value Guide

(Not Approved)
Referred to Board of Governors

Whereas, There is disparity between values attached to the so-called "Usual and Customary Fee" by the physician vendor and the third-party payor respectively, which encourages mutual misunderstanding, mistrust and dislike, and

Whereas, In a schedule such as the Relative Value Guide, adopted by many state societies and specialty groups, the fee-for-service rendered is understood and recognized by both physician vendor and third party payor respectively, and usually the only area of difference of opinion is at the negotiable unit value, and

Whereas, The idea of a Relative Value Guide being considered one's "Usual and Customary Fee" should be palatable to even the most ardent supporter of the "Usual and Customary Fee" concept, therefore, be it

RESOLVED, That (a) the Florida Medical Association endorse the Relative Value Guide as the approved method of determining a usual and customary vendor charge for payment by patient and private and governmental third party payors, and further, that (b) all fee negotiations be on the basis of Relative Value Guide and that (c) the American Medical Association be petitioned to adopt the foregoing policies.

Resolution 70-15
Increased Costs of Medical Practice

Volusia County Medical Society

Not Adopted

"Your Committee recommends that this resolution not be adopted as the facts speak for themselves."

Dr. William Harrison, Volusia: "The Medical Economics Committee of our society passed this resolution and it was well thought out. We would like to see the recommendation of the

reference committee changed so that this resolution is adopted. If the facts speak for themselves, then this august body should recognize it."

The recommendation of the reference committee carried, and Resolution 70-15 was not adopted.

Resolution 70-18
Medicare Part B

Palm Beach County Medical Society

NOT ADOPTED

"Your Committee recommends that this resolution not be adopted in that it would be administratively difficult. After discussion, we feel that Blue Shield is alert to the problem and hope that with the other recommendations being passed on to the House of Delegates that there will be improvement in this situation."

Dr. John Farrell, Palm Beach: "After the reference committee meeting, the Blue Shield people said this would be feasible. I don't believe the reference committee is in a position to say this. It would be relatively easy for them to handle if there were fewer assignments taken."

Dr. Kimmel: "I speak against the recommendation of the Reference Committee. I spoke before Blue Shield about them sending forms to patients intimating that physicians were making charges for visits which were not accurate. As a result, the form was withdrawn. Now, we are faced with the same thing again. All we are asking is that the physician be notified, so that if there is a question, it can be straightened out before the patient is notified."

Dr. Moseley elaborated on the reference committee's thinking in making the recommendation it had made.

The recommendation of the reference committee carried, and Resolution 70-18 was not adopted.

Resolution 70-20
FMA Relative Value Studies

James D. Beeson, Delegate

NOT ADOPTED

Dr. Moseley: "Your Committee recommends that this not be adopted. The Committee on Relative Value Studies is preparing a new manual which will encompass a survey of all physicians and specialties in the state and will be certified by a statistician and should mirror what the anesthesiologists believe to be a valid charge."

The recommendation carried; Resolution 70-20 was not adopted.

Resolution 70-21
Contingency Fees

Collier County Medical Society

NOT ADOPTED

Dr. Moseley: "Your Committee recommends that this not be adopted. The legislative committee is working with this concept from a legal standpont."

The recommendation carried; Resolution 70-21 was not adopted.

Resolution 70-23
Blue Shield

Dade County Medical Association

NOT ADOPTED

Dr. Moseley: "Your Committee recommends that this not be approved. This was discussed at the Reference Committee meeting and Blue Shield would like an opportunity to exhaust other channels before referring to the state association."

The recommendation carried; Resolution 70-23 was not adopted.

Resolution 70-28
Uniform System of Coding and Nomenclature

Duval County Medical Society

"Your Committee recommends adoption of this resolution with the following modification in the second 'Resolved':

> "RESOLVED, That the Florida Medical Association House of Delegates instruct Blue Shield of Florida to adopt the AMA system of coding and nomenclature, second edition, as the universal system for description of medical services as soon as this system has achieved general acceptance and proven to be effective."

"The AMA has approved the California Relative Value Studies; but we felt it wise to base our acceptance on a broader basis than one state's acceptance. We feel if we are going to ask our Blue Shield to go into a new accounting system, it should have more credence with other state associations and give us a greater basis for comparison."

Dr. Robert Andreae, Broward: "It was our feeling on the committee that we did not wish to force Blue Shield into an untenable position. I would, however, like to make this amendment: Place a period after '. . . description of medical services' and omit the remainder of the sentence."

Dr. Zellner: "When the AMA reference committee considered this five-digit system, there was a good deal of opposition by national Blue Shield for good and valid reasons. However, the reference committee felt that the reasons for going to the five-digit system were more overpowering than those for staying on a four-digit system. It is not really the California system, but rather a modification worked out by the AMA and California. It is already in use in California, and several discrepancies and bad things have been discovered. These will have to be worked out. It would cost 15 million dollars, and would take two or three years to do it. So I ask for defeat of the amendment offered and use of the reference committee's wording. It would be impossible to implement in the immediate future."

Dr. Moseley: "This was put in to give a period of adjustment, a little breathing room and to let reason prevail, rather than to give a directive that it must be implemented immediately."

Dr. Fred Butler, Collier, spoke in favor of the amendment.

The amendment carried.

Resolution 70-28 was adopted, as amended.

Resolution 70-28

Uniform System of Coding and Nomenclature

Whereas, The need for a uniform system of coding and nomenclature in order to describe accurately the great variety of medical services has never been greater, and

Whereas, The American Medical Association has prepared an accurate and current system of coding and nomenclature, and

Whereas, State medical associations, specialty societies, and others have delayed their own efforts so as to be certain there would be one universal system of description of professional services, therefore be it

RESOLVED, That this House support the system of coding and nomenclature of the American Medical Association, and be it further

RESOLVED, That the Florida Medical Association House of Delegates instruct Blue Shield of Florida to adopt the AMA system of coding and nomenclature, second edition, as the universal system for description of medical services.

Resolution 70-30
Orange County Medical Society

Resolution 70-31
Broward County Medical Association

Resolution 70-33
Panhandle Medical Society

Blue Shield

Dr. Moseley: "Your Committee recommends that these resolutions not be adopted and the following substitute resolution be adopted."

Motion carried and Substitute Resolution 70-30 was adopted.

Substitute Resolution 70-30

Blue Shield

"Whereas, Blue Shield of Florida, a medical-surgical prepayment health care plan, was started in the state of Florida by the physicians of the Florida Medical Association in 1945 and has continued to the present time as a health service plan for payment of physician services, therefore be it

"RESOLVED, That the House of Delegates of the FMA reaffirms its confidence in the Board of Directors and employees of Blue Shield and urges them to continue to carefully guard the interests of the physicians of Florida, as well as those of the subscribers."

Dr. Moseley: "Mr. Speaker, I would be remiss if I did not point out that Mrs. Arlene Cassens not only put up with me and my worry about grammatical mistakes, but also Bill Straight, and did a tremendous job in this capacity. I wish to thank the committee members; Sam Day, our AMA Delegate; Drs. William M. Straight, Douglas W. Hood, Robert L. Andreae and Earl G. Wolf. I particularly want to thank those who attended this committee meeting. There was an unusual ability to communicate in a gentlemanly way, and of all the people who profited from this meeting, your chairman has learned the most. It has been a privilege.

This concludes the report of Reference Committee No. V."

The Chair recognized Dr. Francis Holland, chairman of Florida's AMA delegation.

Dr. Holland said that in approving the actions of the Board of Governors, it had approved the nomination of Dr. Jere W. Annis for President-Elect of the American Medical Association. He moved that the House acclaim the candidacy of Dr. Annis for that office. The motion was unanimously carried, and gave its standing approval of Dr. Annis' nomination.

Election of Officers

Speaker: "The floor is now open for nominations for President-Elect." He announced that nominating speeches would be limited to two minutes and seconding speeches to one minute.

Dr. Joseph Newhall, Manatee County: "I take great pride in rising to place in nomination for President-Elect of the Florida Medical Association, Dr. Irving E. Hall Jr., of Bradenton. This nomination carries the unanimous support of the Manatee County Medical Society. We make this nomination in the belief that the future of medicine is being tested as never before. Unless our organization can ably respond to and cope with these pressures the practice of medicine as we

know it will shortly disappear. The response to this test must necessarily be conducted at the national and state level, for individual physicians can be swallowed and consumed one by one. This is our organization of response, and it must respond. The decision of our nomination of Dr. Hall was made without desire of personal glory, gain or geographic recognition; but rather in the sincere belief that we must have very active leadership.

"We present this nomination because we sincerely believe Dr. Hall has the energy, enthusiasm and ability to render strong leadership and make the FMA the active voice of the Florida physician. As was so ably stated by one of our fine senior statesmen, Dr. Sam Day, two years ago in this very room, when he rose to support Dr. Hall's candidacy for vice president of this organization, and I quote: 'This Irving Hall—he is full of vim and vigor, as I once was; it is good to have him to build a fire occasionally under those old men on the Board.'

"During his year as president-elect, Dr. Hall plans to visit every county medical society to confer with their leaders and actively enlist those desirous into committee positions available. No member of the Council on Specialty Medicine would be selected without consultation. He will initiate a president-elect report, outlining his findings and plans at the 1971 meeting, and be receptive to modifications as the delegates so desire.

"We have the organization right here in the FMA to accomplish these and so many more achievements. Now, it needs the leadership; now, it needs the spark; now, it needs the drive; now, it needs the fire; now, we need Dr. Irving Hall."

Dr. Hall's nomination was seconded by Dr. Zellner, Past President; Dr. Ray Murphy, Broward County; Dr. Charles Lasley, Pinellas County; Dr. James Basinger, Pasco-Hernando-Citrus County; and Dr. Irving Beychok, Sarasota County.

Dr. Thad Moseley, Duval County: "Bear with me as I make you listen again. I could not miss an opportunity to remind you of something said in an issue of the Journal of FMA several years ago. Dr. W. C. Thomas of Gainesville, stated that 'in a search for a man to fill a position of responsibility within the FMA, the job should search for the man.' We are fortunate within this state organization in having many excellent and outstanding people who can fill a particular need of the organization. These people have come forward. We also are fortunate in finding in nearly every candidate those qualifications for which we search. As we look at our men in this state, we find that to earn the respect of one's peers is a goal of each of us; and, if in so doing, a man can maintain his own self-respect, he has probably achieved the highest goal that is possible. This man—honest, intelligent, with consideration for others—is rarely found, for such a man thinks of others—their problems and the means to solve these problems—as well of himself, his family and his position in society. Such a man, I believe, is Floyd Hurt. In his practice of radiology, in his daily contacts with physicians representing all disciplines of medicine; in his participating in the activities of his specialty group; in his contribution to his county medical society; in his service as secretary, and at one time treasurer, of the Florida Medical Association; and in his life as a father and a citizen; he has displayed an ability to listen, to think, and to act as his best judgment dictates, proving himself acutely attuned to what we as physicians think and yet keenly aware of the patient's needs. When I say patient's needs, I talk about this world's needs.

"We as physicians at this time find ourselves under many pressures. All of them are not bad; all of them can't be bad because there is too large a percentage of our population who feel that something is wrong. With the insight Floyd has displayed, and with his manifested ability, he can bring further honor to our society and to the physicians of our state as president of the Florida Medical Association, and in this position deal intelligently and with honor, in adjustments which the patient might need, and which we as physicians might need.

"Therefore, Mr. Speaker, it is my privilege to place in nomination for the position as President-Elect of the Florida Medical Association, Floyd K. Hurt of the Duval Medical Society."

Dr. Hurt's nomination was seconded by Dr. Richard Fleming, Board of Governors; Dr. Henry Harrell, Marion County; Dr. William Wilhoit, Escambia County; Dr. John Fisher, Duval County, and Dr. William C. Roberts, Past President.

The nominations were closed, and Dr. Floyd K. Hurt was elected President-Elect by secret ballot.

Dr. Hurt was escorted to the platform by Dr. Thad Moseley and Dr. Richard Fleming.

Dr. Hurt: "I appreciate this honor; and I do consider it an honor. A man was opposing me for

whom I have a great deal of respect. Even though we have differences of opinion in our House, let us not continue the debates we have had here today. Let's present a united front. United, we can solve our problems."

The Speaker requested nominations for Vice President.

Dr. William Straight, Dade County: "I take great pleasure in introducing the name of Dr. Richard Dever for Vice President of our Association. This man has served this Association well for a number of years as chairman of the Scientific Council, and has devoted untold hours in putting together our scientific sessions year after year after year. He is well known to the men in Dade County as a highly intelligent, conscientious, reliable person, and I think he would serve the Association well."

Dr. Ferguson, Duval County, seconded Dr. Dever's nomination.

There were no further nominations, and a unanimous ballot was cast for Dr. Dever.

Dr. Dever: "In fear and trembling of a motion to reconsider, I accept with gratitude."

The following delegates and alternate delegates to the American Medical Association were duly elected, for terms beginning January 1, 1971, and expiring December 31, 1972:

Delegate—Dr. Samuel M. Day
Alternate—Dr. Jack Q. Cleveland
Delegate—Dr. Francis T. Holland
Alternate—Dr. Francis C. Coleman
Delegate—Dr. Jere W. Annis
Alternate—Dr. Rufus K. Broadaway

Dr. Cleveland was also unanimously elected as the alternate delegate to complete the vacant term, expiring on December 31, 1970.

Dr. David Hubbell, of Pinellas County, nominated Dr. Charles K. Donegan as Speaker of the House. The nomination was seconded by Dr. Donald Marion, Dade County.

Nominations were closed and a unanimous ballot cast for Dr. Donegan.

Dr. Vincent Corso, of Dade County, nominated Dr. Franklin J. Evans as Vice Speaker of the House. The nomination was seconded by Dr. Zellner and Dr. Kaplan.

Nominations were closed and a unanimous ballot cast for Dr. Evans.

The Speaker declared the floor open for nominations for the office of Secretary-Treasurer.

Dr. Clyde Collins, Duval County: "For the position of Secretary-Treasurer, I would like to nominate a young man who has grown faster in his grasp of the problems of organized medicine than anyone I have ever known. And so, he has developed as an outstanding leader for us in northeast Florida and over the nation as well. He has been chairman of the Council on Allied Professions and Vocations, is a member of the AMA Committee on Nursing, a practicing pediatrician, is currently president of Duval County Medical Society, Florida's oldest county medical society, and I would like to nominate Dr. James Walker for Secretary-Treasurer of FMA."

Dr. Walker's nomination was seconded by Dr. Joseph Matthews, Orange County; Dr. Samuel Kaplan, Sarasota County, Dr. James Ingram, Hillsborough County, and Dr. Rufus Broadaway, Dade County.

Nominations were closed and a unanimous ballot was cast for Dr. Walker.

The Speaker said that the nominations for the Committee on Membership and Discipline from the Board of Governors appear in the Handbook, and asked for nominations from the floor.

The following members were unanimously elected to the vacancies on the Committee on Membership and Discipline:

District 1—James T. Cook, Marianna (1972)
William W. Thompson, Fort Walton Beach (1974)

District 2—Charles E. Barrineau, Palatka (1971)
Louis G. Landrum, Lake City (1973)
J. Maxey Dell Jr., Gainesville (1974)

District 3—John A. Rush Jr., Jacksonville (1972)
Leslie R. Adams, Jacksonville (1973)
Samuel J. Alford Jr., Jacksonville (1974)

District 4—Carroll M. Crouch, Daytona Beach (1971)
William W. O'Connell, St. Augustine (1973)
Edwin H. Updike II, Ocala (1974)

District 5—Truett H. Frazier, Orlando (1972)
Theodore J. Kaminski, Melbourne (1974)

District 6—Linus W. Hewit, Tampa (1971)
James M. Ingram, Tampa (1974)

District 7—John B. Butcher, Sarasota (1972)
Woods A. Howard, Lakeland (1973)
H. Quillian Jones Sr., Fort Myers (1974)

District 8—John P. Ferrell, St. Petersburg (1971)
Richard Reeser Jr., St. Petersburg (1974)

District 9—Martin G. Gould, Fort Pierce (1972)
John S. Stewart, Naples (1973)
Charles M. Harris Jr., West Palm Beach (1974)

District 10—Russell B. Carson, Fort Lauderdale (1972)
Henry D. Perry, Hollywood (1974)

District 11—Harold Rand, Miami (1971)
Richard C. Dever, Miami (1973)
Vincent P. Corso, Miami (1974)

District 12—J. Lee Dockery, Miami (1971)
Richard M. Fleming, Miami Beach (1974)



Dr. Babers wishes Dr. Cook well after having presented to him the president's personal gavel and the president's certificate.



Dr. Cook pins past president's button on Dr. Babers.

The meeting was turned over to the President, Dr. Henry Babers.

Dr. Babers: "This has been a very exciting convention. It has certainly done a lot for our knowledge." He presented to Dr. Cook, the incoming president, the president's personal gavel and the president's certificate.

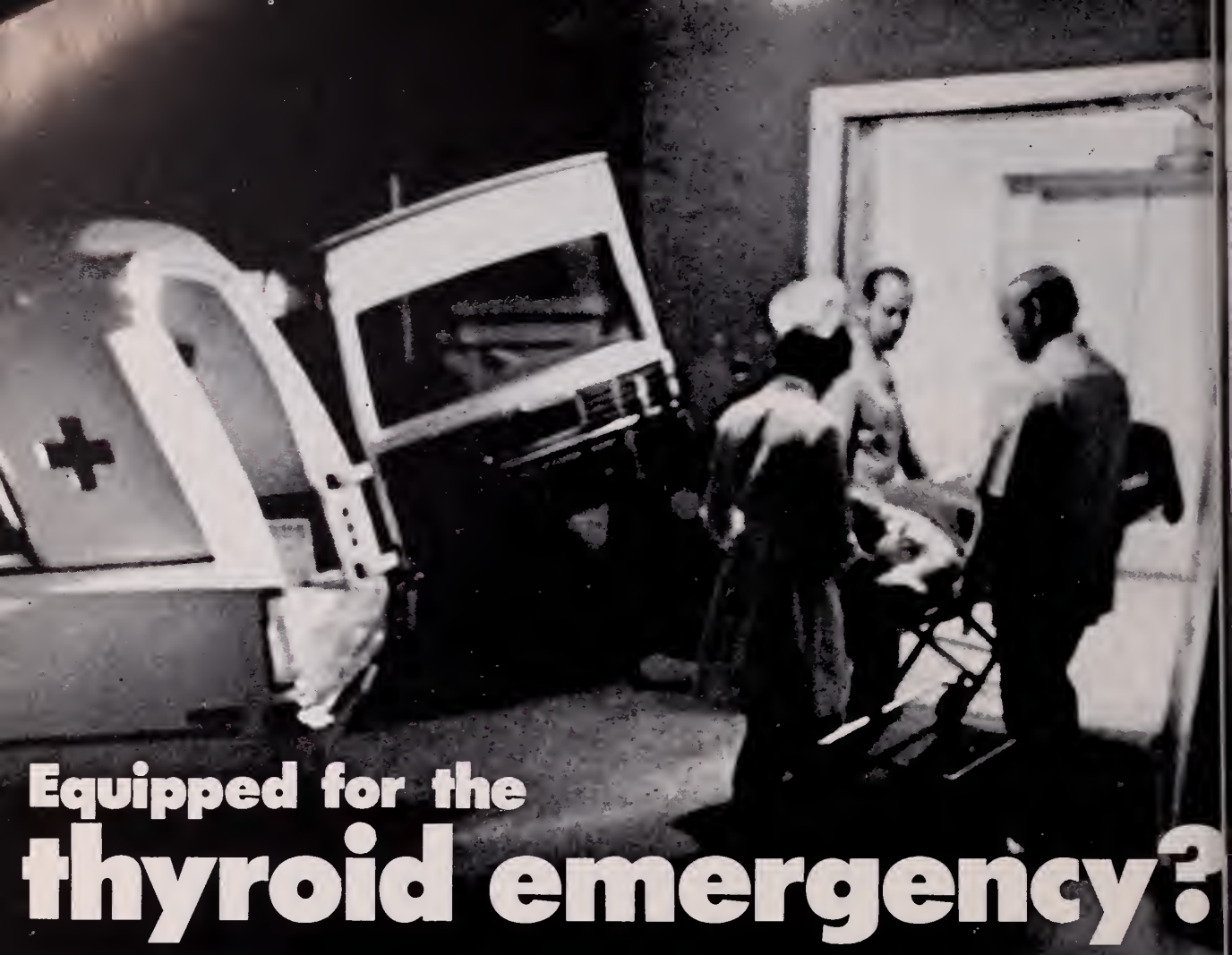
Dr. Cook thanked Dr. Babers, and presented to him the past president's button.

Mrs. Babers was escorted to the rostrum by Dr. Billy Brashear and Dr. Robert Zellner, where Dr. Cook presented Dr. Babers' portrait to her.

Dr. Cook: "I think that we can see by the actions today that no one person and no Board of Governors can completely please all of you. I can assure you that I, and the Board of Governors, will make every effort to carry out your dictates and your wishes. I would like to introduce my wife. Lillian, please stand up." He announced the membership of the Board of Governors for the coming year, and said that the Board would meet in the Embassy Room immediately upon adjournment of the House. All Council chairmen were invited to attend.

The outgoing president, Dr. Babers, was honored with a standing ovation of the House.

Dr. William W. O'Connell gave the benediction. The House adjourned at 1:10 p.m.



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PRECAUTIONS: As with other thyroid preparations, overdose may cause diarrhea or cramps, nervousness, tremors, tachycardia, insomnio and continued weight loss. These effects may become apparent in from 4 days to three weeks. Therefore, patients should be kept under close observation. Medication, in such cases, should be stopped for 2 to 6 days, then resumed at a lower level. In patients with diabetes mellitus, look for possible changes in metabolic activity which may affect insulin or other antidiabetic drug dosage requirements.

CONTRAINDICATIONS: Thyrotoxicosis, acute myocardial infarction.

SIDE EFFECTS: Side effects are secondary to increased rotes of body metabolism: sweating, heart palpitations with or without pain, leg cramps, weight loss, diarrhea, vomiting and nervousness. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. In most cases, a reduction in dosage followed by a more gradual adjustment upward will indicate the patient's dosage requirements without the appearance of side effects.

DOSAGE AND ADMINISTRATION: In myxedematous stupor or coma, with no evidence of severe heart disease, 200 to 400 mcg. of SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing a solution containing 100 mcg. per ml. Detectable effects are usually observed by the sixth hour after injection and are fully appreciated during the following day. A repeat injection of 100 to 200 mcg. may be given on the second day if significant improvement has not occurred. The intravenous use of sodium levothyroxine in myxedematous coma is advantageous because it produces a predictable increase in the concentration of protein-bound iodine, eliminates the need for multiple doses until oral therapy is reinstated, circumvents the uncertainty of oral absorption, and avoids the risk of pulmonary aspiration.

SUPPLIED: SYNTHROID (sodium levothyroxine) INJECTION is supplied in 10 ml. vials containing 500 mcg. of lyophilized active ingredient and 10 mg. of Mannitol, N.F.; a 5 ml. vial containing Sodium Chloride Injection, U.S.P. is provided as diluent.

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Your Proceedings Issue

This issue of the JOURNAL is the biggest, most expensive and perhaps the most important of all that will be published in the ensuing next ten months. A lot of time and effort has gone into the gathering, sorting and correcting of all that transpired or was uttered at the 96th annual meeting of the Florida Medical Association.

On an average month, revenue obtained from advertising usually offsets the expense of paper, printing, illustrations, handling and mailing the JOURNAL. Rarely, however, do special issues pay for themselves and the agencies from which we receive our advertising are unpredictable as to what they will spend from month to month.

At the organizational meeting of your new editorial board last May, a resolution was approved that we develop a realistic budget, eliminating all waste and unnecessary costs yet curtailing nothing creative that your editors think worthwhile to obtain increasing reader interest.

Here's hoping that you do more than casually glance through this issue and so learn about your organization. C.M.C.

Gone With The Wind

JOHN J. FISHER, M.D.

The private practice of medicine as we know it in these United States is facing a challenge at present as great as any it has been charged with in recent years—and these have indeed been many. It seems as though there is an organized campaign to undermine the confidence of the public in our profession. Recent television specials have exaggerated our shortcomings. Newspaper cartoonists have blamed us alone for the high cost of medical care. Articles in so-called "newsmagazines" make it appear that we are responsible for the inadequacies of the federal program, which we warned against and fought so hard to prevent.

Indeed it almost seems that all of this is like unto an artillery barrage employed to soften up our defenses so the attack, which is certain to follow, will establish successfully a national health system and accomplish finally the fact of socialized medicine.

We should have learned by now that former methods of resistance and past arguments have been of little avail and will prove no more effective a defense against this newest assault. Right or wrong, these challenges must be recognized, not ignored; met, not resisted; acted upon, not reacted against. Being right is not enough when there are over 200 million of them and less than a half million of us. Unfortunately, our minority group is too small a minority.

People have been led to believe that medical care is their inherent right and they are demanding it now. This same public equates availability with quality of medical care.

It is up to us to come up with a solution for making some form of health care easily available to all. This may be a lower standard of care, but it must be available. Almost every one believes he has the right to drive a car, but not every one expects that car to be a Cadillac. It is paradoxical that perhaps we have "qualitied" ourselves out of the reach of many of our fellow citizens.

It will be necessary to institute new methods of education that will provide more physicians of less specialization. Paramedical personnel and technicians must be used in new capacities to augment our effectiveness. The public must be educated in the proper utilization of available medical resources.

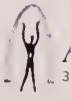
Organized medicine must come up with methods to implement positive programs. To develop these we must call upon the potential of all our members. Moreover, those that lead us must change with the times or we, like another once great and proud culture, shall find ourselves "gone with the wind."

▶ Dr. Fisher, 836 Miami Road, Jacksonville 32207.

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Brief Summary of Prescribing Information—9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
Usual Dose: 1 tablet b.i.d.
Supplied: Bottles of 60, 600, and 1000 scored 50 mg. tablets.

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The antihypertensive therapy that is easy to live with.*

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Easy-to-live-with control. Gradual reduction of blood pressure leading to decisive, comfortable control is the common clinical response.

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Easy-to-live with dosage. Two tablets a day usually achieves control. One to two tablets a day often maintains control without need for additional antihypertensive agents.

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Your local Guild Optician also is an expert at working with your patient in an understanding manner when it comes to the styling and fit of your patient's frame. His stocks reflect not only the most modern fashions, but also the conservative styles that have lasted over the years.

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gonorrhea
granuloma inguinale
listeriosis
lymphogranuloma
mixed bacterial infection
osteomyelitis
otitis
pertussis
pharyngitis
pneumonia
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Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage. Upon adverse reaction, stop medication and treat appropriately.

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Letters

Dear Editor: RE: Medicaid

If appropriate and reasonable to you, we would suggest a brief explanation in the JOURNAL regarding physician's reimbursement under Medicaid. Our impression is that there is considerable misunderstanding among the physicians in Florida and such an explanation would be helpful to everyone.

At the present time our payment policy in general terms is as follows:

> Physicians are reimbursed on the basis of usual and customary charges within the seventy-fifth percentile. The seventy-fifth percentile means that a payment for a service or procedure in a particular section of the state will cover seventy-five percent of the physician's usual and customary charge in that section. The higher charging twenty-five percent of the physicians would have their fees reduced to the seventy-fifth percentile amount.
>
> Since under the current state appropriation act, funds cannot be transferred in or out of the line item appropriation for physician services, there is a policy provision for prorating payments for any given month if the total physician billing exceeds the monthly amount available from the appropriation. There has been no need to apply this policy to date.

Thank you very much for your consideration in this matter and if further clarification is needed, please advise.

EMMETT S. ROBERTS, DIRECTOR
DIVISION OF FAMILY SERVICES
DEPARTMENT OF HEALTH &
REHABILITATIVE SERVICES
JACKSONVILLE

Franz H. Stewart, M.D.
Dear Dr. Stewart:

It was with great interest that I read your article in "History and Highlights" entitled "Early Florida and Organized Medicine" published in the May 1970 issue of *The Massachusetts Physician.* It was most interesting from two points of view: one, to find a story about the Journal of the Florida Medical Association in *The Massachusetts Physician,* and two, to see your picture shining forth from this publication from the far north.

For a number of years, as you may or may not know, I have been a nonresident member of the Massachusetts Medical Society, one of the advantages of which is that I receive the *New England Journal of Medicine* and the publication *The Massachusetts Physician;* however, this is the first time that this particular publication has ever put forth anything from the State of Florida, and it is worthwhile to note that it was a most eminent presentation for a first.

Again, my congratulations.

J. GERARD CONVERSE, M.D.
WINTER HAVEN

EDITOR'S NOTE: Dr. Stewart's article entitled "Early Florida and Organized Medicine," published in the May 1970 issue of The Massachusetts Physician, will appear in its entirety in the August issue of this JOURNAL.



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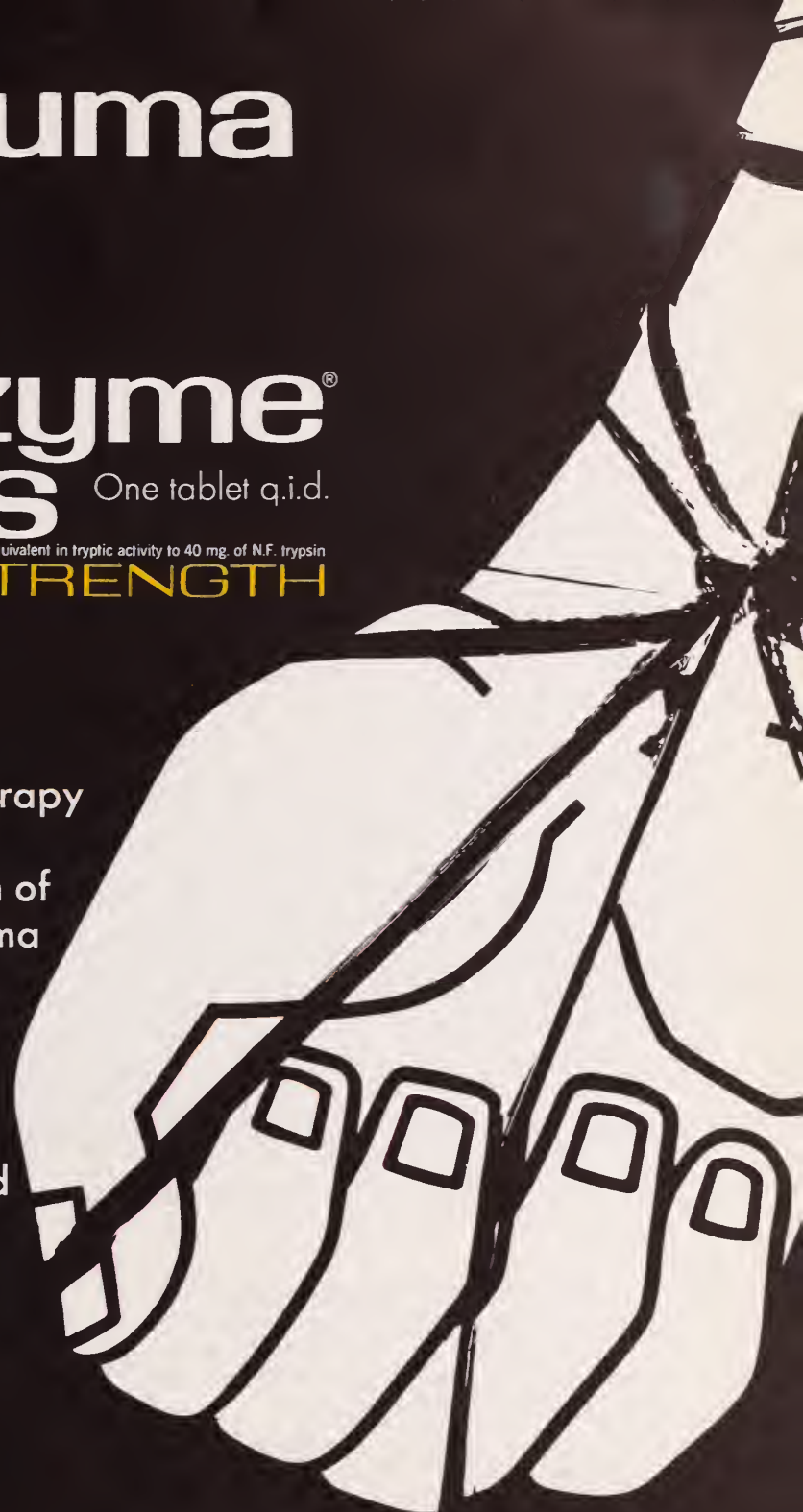
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References: 1. Gardner, H. L.: J. Miss. M.A. 8:529, 1967. 2. Porter, P. S., and Lyle, J. S.: Arch. Dermat. 93:402, 1966. 3. Walsh, H.; Hildebrandt, R. J., and Prystowsky, H.: Am. J. Obst. & Gynec. 93:904, 1965. 4. Vaginitis and the Pill: J.A.M.A. 196:731, 1966. 5. Guerriero, W. F.: South. M.J. 56:390, 1963. 6. Seelig, M. S.: Am. J. Med. 40:887, 1966. 7. Ta-day's Drugs, New York, Grune & Stratton, Inc., 1965, p. 316. 8. Gray, L. A., and Barnes, M. L.: Am. J. Obst. & Gynec. 92:125, 1965. 9. Salerna, L. J.; Ortiz, G., and Turkel, V.: Vaginitis: A Diagnastic and Therapeutic Approach, Scientific Exhibit, presented at the 115th Annual A.M.A. Convention, Chicago, Illinois, June 1966. 10. Walsh, J. C.; Sheffery, J. B., and Wilson, T. A.: Med. Ann. D.C. 37:358, 1968. 11. Nugent, F. B., and Myers, J. E.: Pennsylvania Med. 69:44, 1966.

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Deaths

Boles, Arthur E., Miami; born 1906; Tulane University, 1928; member AMA; died February 20, 1970.

Chapman, William H., Jacksonville; born 1914; University of Arkansas, 1942; member AMA; died March 22, 1970.

Childs, Lincoln B., Jacksonville; born 1911; Meharry University, 1940; died January 18, 1970.

Hartsfield, Richard C., Ocala; born 1916; Medical College of Georgia, 1951; member AMA; died August 28, 1969.

Huggins, Evans L., DeFuniak Springs; born 1888; Atlanta P & S, 1912; died October 1968.

Jennings, John L. Jr., Palmetto; born 1908; Medical College of Georgia, 1934; died June 8, 1969.

Kennon, Charles L., Miami; born 1891; Emory University, 1916; died November 20, 1969.

Litt, Edward T., Miami Beach; born 1901; University of Pennsylvania, 1924; died January 16, 1970.

Overman, William J., Pensacola; born 1919; Temple University, 1944; member AMA; died April 1, 1970.

Pauley, Harvey C. Jr., Bradenton; born 1919; Tufts University, 1944; member AMA; died March 29, 1970.

Pepper, Max, Miami; born 1905; Jefferson Medical College, 1931; died January 27, 1970.

Rentz, Lawson S., Miami; born 1889; Emory University, 1915; died March 26, 1970.

Sanguinetti, Alberto A., Chipley; born 1903; University of Buenos Aires, 1929; member AMA; died (date unknown).

Scott, Stuart D., Gainesville; born 1893; Medical College of Virginia, 1919; died February 23, 1970.

Walker, Harrison A., Miami; born 1890; Indiana University, 1917; died March 3, 1970.

White, Alvyn W. Jr., Pensacola; born 1933; Duke University, 1958; died December 15, 1969.

So live that when thy summons comes to join
The innumerable caravan, that moves
To the pale realms of shade, where each shall take
His chamber in the silent halls of death,
Thou go not, like the quarry-slave at night
Scourged to his dungeon, but sustained and soothed
By an unfaltering trust, approach the grave
Like one who wraps the drapery of his couch
About him and lies down to pleasant dreams.

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MEETINGS

Approved by FMA Committee on Postgraduate Education

AUGUST

27-29 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Fort Lauderdale. For information: A. F. Caraway, M.D., Div. of Health, P.O. Box 210, Jacksonville 32201.

OCTOBER

9-10 Seminar on Diabetes, Sheraton Hotel, Fort Lauderdale. For information: George P. Heffner, M.D., 4602 N. Federal Highway, Fort Lauderdale 33308.

NOVEMBER

13-14 ENT for the Family Practitioner, Sheraton Four-Ambassadors Hotel, Miami. Contact: Frederic W. Pullen II, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, University of Florida, Gainesville. For Information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

DECEMBER

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings Held in Florida

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn, M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F. Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

Book Review

Cancer-A Manual for Practitioners by the Massachusetts Division of the American Cancer Society. Pp. 407. 4th Ed. Price $3.00. Boston, American Cancer Society, 1968.

This comprehensive cancer manual packs a lot of useful information into 400 pages. As the name implies, it is not a detailed text. The first ten chapters deal with epidemiology, methods of diagnosis and general principles of treatment. The next 29 chapters deal with various specific types of cancer in different anatomic sites. The last chapters discuss the general topics of cancer in children, hormones, chemotherapy and palliative treatments. The book is published by the Massachusetts Division of the American Cancer Society and concludes with a chapter on the work of that organization. As you might expect, the chapters are written by prominent Massachusetts physicians, many of whom are nationally known in their fields. The book has been distributed apparently free of charge to all registered physicians in Massachusetts as well as all medical students and every hospital, nursing school and public library in that state.

The material in the book is up to date, accurate and concise. It provides a good starting point for the physician who sees cancer patients infrequently. It would make a handy "first look" reference volume for the family physician.

LAWRENCE H. JACOBSON, M.D.
POMPANO BEACH

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Company, 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. New York, Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

Surgical Pathology by Lauren V. Ackerman, M.D and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 by Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Medical Interviewing by Robert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Practical Urology by Chester C. Winter, M.D. Pp. 249. Price $11.00. 251 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Atlas of Human Electron Microscopy by Ruben P. Laguens and Cesar L.A. Gomez Dumm. Pp. 180. Illustrated. Price $20.50. St. Louis, The C. V. Mosby Company, 1969.

Plastic and Maxillofacial Trauma Symposium, Nicholas G. Georgiade, editor. Pp. 221. Price $25.00. 390 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

A Synopsis of Contemporary Psychiatry by George A. Ulett, M.D. and D. Wells Goodrich, M.D. Pp. 340. Price $9.50. St. Louis, The C. V. Mosby Company, 1969.

Genetics and Counseling in Medical Practice by Leonard E. Reisman, M.D. and Adam P. Matheny Jr., Ph.D. Pp. 215. Price $12.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969

Infectious Diseases and General Medicine, Vol. III. Prepared and published under the direction of Lieut. General Leonard D. Heaton. The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969

Prematurity and the Obstetrician by Denis Cavanagh, M.D. and M. R. Talisman, M.D. Pp. 542. Price $16.50. Illustrated. New York, Appleton-Century-Crofts, Division of Meredith Publishing Company, 1969.

Symposium on the Spine by American Academy of Orthopaedic Surgeons. Pp. 289. Price $19.50. 558 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Personnel Administration and Labor Relations in Health Care Facilities by James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Mosby Company, 1969.

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Rational Therapy and Control of Tuberculosis edited by Joseph E. Johnson III, M.D. Pp. 191. Illustrated. Price $8.50. Gainesville, University of Florida Press, 1970.

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AUGUST COVER—A Seminole medicine man preparing the black drinks at the annual Green Corn Dance. Painted by James Hutchinson, foremost Seminole portraitist.

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Behaviaral Prablems in Mental Deficiency and Chranic Brain Syndrame: The effect af Serentil was faund ta be excellent ar gaad in the management af hyperactivity and uncaaperativeness assaciated with Mental Deficiency and Chronic Brain Syndrome.

Psychaneuratic Manifestatians: Serentil reduces the symptams of anxiety and tensian, prevalent symptams aften assaciated with neurotic components af many disarders, and benefits personality disorders in general.

CONTRAINDICATIONS: As with ather phenathiazines Serentil (mesaridazine) is contraindicated in severe centrol nervaus system depression or comatase states from any cause. Serentil is contraindicated in individuals who have previausly shawn hypersensitivity to the drug.

WARNINGS: Where patients are participating in octivities requiring complete mental alertness (e.g., driving), it is advisable to administer the phenathiazines cautiously and ta increase the dosage gradually.

Usage in pregnancy: The safety of this drug in pregnancy has not been established; hence, it should be given anly when the anticipated benefits ta be derived fram treatment exceed the possible risks to mother and fetus.

Usage in children: The use of Serentil in children under 12 years of age is not recommended, because safe conditians for its use have not been established.

Attention should be paid to the fact that phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcahol, etc.) as well as atrapine and phosphorus insecticides.

PRECAUTIONS: While acular changes have not ta date been related to Serentil, one shauld be aware that such changes have been seen with other drugs of this class.

Because of possible hypatensive effects, reserve parenteral administration for bedfast patients or for acute ambulatory cases, and keep patient lying down for at least ½ hour after injectian.

Leukopenia and/or agranulacytosis have been attributed to phenathiazine therapy. A single case of transient granulocytopenia has been assaciated with Serentil (mesoridazine).

ADVERSE REACTIONS: Drowsiness and hypatension were the mast prevalent side effects encountered. Side effects tended ta reach their maximum level of severity early with the exceptian of a few (rigidity and mataric effects) which accurred later in therapy.

With the exceptians af tremar and rigidity, adverse reactians were generally faund amang thase patients wha received relatively high dases early in treatment. Clinical data shawed na tendency for the investigatars to terminate treatment because af side effects.

Serentil has demonstrated a remarkably low incidence of adverse reactions when campared with other phenothiazine campaunds.

Central Nervaus System: Drowsiness, Parkinson's syndrome, dizziness, weakness, tremor, restlessness, ataxia, dystonia, rigidity, slurring, akathisia, motoric reactions (apisthatanos) have been reported.

Autanamic Nervaus System: Dry mouth, nausea and vamiting, fainting, stuffy nose, phataphobia, constipatian and blurred vision have occurred in some instances.

Endacrine System: Inhibition of ejaculation and loctation have been nated rarely.

Skin: Itching, rash, hypertrophic papillae of the tongue and angioneurotic edema have been reported.

Cardiavascular System: Hypatension and tachycardia have been reported. EKG changes hove occurred in some instances (see Phenothiazine Derivatives: Cardiavoscular Effects).

Phenothiazine Derivatives: It should be noted that efficacy, indications ond untoward effects hove varied with the different phenathiazines. The physician should be aware that the follawing hove accurred with one or more phenothiazines and shauld be considered whenever one of these drugs is used:

Autanamic Reactians: Miosis, obstipotion, anorexia, paralytic ileus.

Cutaneaus Reactians: Erythema, exfoliative dermatitis, contact dermatitis.

Blaad Dyscrasias: Agranulocytosis, leukopenia, eosinaphilia, thrombocytopenia, anemia, aplastic anemia, poncytapenia.

Allergic Reactians: Fever, laryngeal edema, angioneurotic edema, asthma.

Hepatataxicity: Jaundice, biliary stasis.

Cardiavascular Effects: Changes in the terminal portion of the electrocardiogram, including prolangation of the Q-T interval, lawering and inversian af the T-wave and appearance of a wave tentatively identified as o bifid T ar a U wave have been observed in some patients receiving the phenothiazine tranquilizers, including Serentil (mesaridazine). To dote, these appear ta be due to altered repalarization and not related to myocardial damage. They appear to be reversible. There is na evidence at present that these chan are in any way precursors af any significant turbance af cardiac rhythm.

Hypatensian, rarely resulting in cardiac ar has been nated.

Extrapyramidal Symptams: Akathisia, agita matar restlessness, dystanic reactians, tris tarticallis, apisthatanas, aculagyric crises, tre muscular rigidity, akinesia—same af which rare accasians have persisted far several ma ar years especially in patients af advanced with brain damage.

Endacrine Disturbances: Menstrual irregular altered libida, gynecamastia, weight gain. F pasitive pregnancy tests have been reparted.

Urinary Disturbances: Retentian, incantinence.

Others: Hyperpyrexia. Behaviaral effects sug tive af a paradaxical reactian have been repa These include excitement, bizarre dreams, ag vation of psychases and toxic confusional st More recently, a peculiar skin-eye syndrame been recognized as o side effect fallawing l term treatment with phenathiazines. This reac is marked by progressive pigmentatian of ar of the skin or conjunctiva and/ar accompanie discolaratian af the expased sclera and car Opacities of the anterior lens and carnea scribed as irregular or stellate in shape h olso been reported.

DOSAGE AND ADMINISTRATION: Oral: The age af Serentil (mesaridazine), as in mast cations, should be adjusted to the needs af individual. The lowest effective dasage sh always be used. When maximum respons achieved, dosage may be reduced gradually a maintenance level.

Alcahalism: Far most patients the usual star dose is 25 mg. b.i.d. The usual aptimum daily dase range is 50-200 mg. per day.

Schizaphrenia: For mast patients, regardless severity, a storting dase of 50 mg. t.i.d. is re mended. The usual aptimum total daily dose ra is 100-400 mg. per day.

Behaviaral Prablems in Mental Deficiency Chranic Brain Syndrame: For most patients a ing dase of 25 mg. t.i.d. is recammended. usual optimum total daily dose range is 75-300 per day.

Psychaneuratic Manifestatians: For most patients usual starting dose is 10 mg. t.i.d. The usual mum tatal daily dose range is 30-150 mg. per

Injectable Form: In those situations in which intramuscular form af medicatian is indic Serentil (mesaridazine) Injectable is available. most patients a starting dose of 25 mg. is re mended. The dose may be repeated in 30 t minutes, if necessary. The usual optimum tatal d dose range is 25-200 mg. per doy.

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Contraindications: Porphyrio or sensitivity to borbiturotes.

Precautions: Exercise coution in moderote to severe hepotic diseose. Elderly or debilitoted potients may reoct with morked excitement or depression.

Adverse Reactions: Drowsiness ot doytime sedotive dose levels, skin roshes, "hongover" ond systemic disturbonces ore seldom seen.

Warning: Moy be hobit forming.

Usual Adult Dosage: For doytime sedotion, 15 mg. to 30 mg. t.i.d. or q.i.d. For hypnosis, 50 mg. to 100 mg. Avoiloble os: Toblets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (olcohol 7%). BUTICAPS® [Copsules BUTISOL Sodium (sodium butoborbitol)] 15 mg., 30 mg., 50 mg., 100 mg.

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See Clinical Considerations section on last page...

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ADULT DOSAGE GUIDELINES

See definitive prescribing information in Package Insert.

Patients with Normal Renal Function

Total Daily Dose (administered in two, three, or four divided doses)			
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Urinary Tract Infections (due to susceptible strains of gram-negative bacteria)†	0.8-1.2 mg./kg. for 7-10 days	Larger doses or additional antibacterial therapy should be considered in severe urinary tract infections or in resistant cases involving the renal parenchyma or anatomic anomaly.	up to 5 mg./kg.
Other Infections including bacteremia, infected surgical wounds, severe soft tissue infections, and respiratory tract infections (due to susceptible strains of gram-negative bacteria)	3 mg./kg. for 7-10 days		

†Alkalinization of the urine may be a useful therapeutic adjunct.

Patients with Impaired Renal Function

To minimize the risk of ototoxicity in patients with impaired kidney function, only the first dose should be that normally recommended. Each subsequent dose should be half or less of that recommended for patients with normal renal function, depending upon the degree of renal impairment.

In patients with renal failure who are undergoing 14-hour hemodialysis twice weekly, administration of 1 mg./kg. GARAMYCIN Injectable at the end of each dialysis period has been suggested.

Clinical Considerations

Indications: GARAMYCIN Injectable is clinically effective in infections due to susceptible strains of gram-negative bacteria, including *Pseudomonas aeruginosa,* and species of indole-positive and indole-negative *Proteus, Escherichia coli,* and *Klebsiella-Aerobacter.* Bacteriologic studies should be conducted to identify the causative organism and to determine its sensitivity to gentamicin sulfate. Sensitivity discs of the drug are available for this purpose. If the susceptibility tests indicate that the causative organism is resistant to gentamicin sulfate, other appropriate antibiotic therapy should be instituted.

IN VITRO INHIBITION OF CLINICALLY IMPORTANT BACTERIA BY GENTAMICIN SULFATE (TUBE DILUTION STUDIES)

BACTERIA	No. of Strains Tested	No. of Strains (%) Inhibited by: 4 mcg./cc. or less		8 mcg./cc. or less*		No. of *In Vitro* Studies
Staphylococcus aureus	1,210	1,200	(99%)	1,206	(99%)	11
Pseudomonas aeruginosa	885	771	(87%)	828	(93%)	16
Escherichia coli	836	736	(88%)	779	(93%)	11
Indole-positive and indole-negative *Proteus* species	477	210	(44%)	358	(75%)	12
Klebsiella-Aerobacter species	292	205	(70%)	231	(79%)	10

*Number of strains (%) of gram-negative bacteria inhibited by 10 mcg./cc. or less are as follows: *Pseudomonas aeruginosa,* 828 (93%); *Escherichia coli,* 792 (95%); *Proteus* species, 393 (82%); *Klebsiella-Aerobacter* species, 284 (97%). From same studies as above.
Source: Package Insert

This drug should be limited to the treatment of serious infections caused by gram-negative bacteria, particularly *Pseudomonas aeruginosa, Proteus* and other susceptible organisms, with due regard for relative antibiotic toxicity. Therefore, the drug should be considered for use against gram-negative: 1. Bacteremia; 2. Infected surgical wounds; 3. Severe soft tissue infections, including burns complicated by sepsis; 4. Respiratory tract infections; and 5. Selected cases of urinary tract infection.

Contraindications: GARAMYCIN Injectable is contraindicated in individuals with a history of hypersensitivity or toxic reactions gentamicin.

Warnings: Patients receiving treatment with GARAMYCIN should be under close clinical observation because of the toxicity associated with the use of this drug. Ototoxicity, vestibular and auditory, can occur in patients, primarily those with pre-existing renal damage, treated with GARAMYCIN Injectable, usually for longer periods or with higher doses than recommended.

GARAMYCIN Injectable is potentially nephrotoxic, and this should be kept in mind when it is used in patients with pre-existing renal impairment. Kidney function diminished by infection of the upper urinary tract may, however, improve during effective treatment with GARAMYCIN Injectable.

Concurrent administration of potentially ototoxic drugs such as streptomycin and kanamycin or of potentially nephrotoxic drugs such as polymyxin, colistin, and kanamycin with gentamicin sulfate has not been shown to afford any clinical advantages and, moreover may result in additive toxicity. Monitoring of vestibular, cochlear, and renal function will provide guidance for therapy in such cases.

Precautions: In patients with impaired renal function in who serious infection develops, serum concentrations of the drug m rise, with consequently increased risk of ototoxicity. In these p tients or in those in whom recommended dosage or duration therapy must be exceeded as a life-saving measure, routine studi of kidney function should be performed when possible. These m be supplemented by evaluation of the vestibular and auditory fun tion and measurement of serum concentration of the drug whe feasible. Serum concentrations of gentamicin should be maintaine below the range of 10-12 mcg./ml. to reduce risk of ototoxicity.

Ordinarily, treatment should not be given for more than 7 to 1 days or be repeated unless required for serious infection not r sponsive to other agents.

As with other antibiotics, treatment with GARAMYCIN Injectab may occasionally result in overgrowth of nonsensitive organisms. superinfection occurs, appropriate therapy is indicated.

Safety for use in pregnancy or the potential for fetal ototoxicity nephrotoxicity have not been established. Studies in pregnant an mals have not revealed teratogenic or ototoxic effects in the fetu GARAMYCIN Injectable should not be used in pregnant patients in women of childbearing age unless its use is deemed advisabl by the physician.

Adverse Reactions: The overall incidence of ototoxicity considere related to treatment with GARAMYCIN Injectable was 2.8 per cen (16 of 565 patients). Contributory factors (two or more factors wer relevant to most patients) were as follows: 10 had azotemia, 1 received a total of 1 gram or more of the drug, 7 had recently re ceived other potentially ototoxic antibiotics (streptomycin or kana mycin), and 5 were over 60 years of age. Six also had decrease high-tone hearing acuity, which returned to or toward normal i the 4 patients retested.

Analysis of BUN data indicated that 4 (2%) of 172 patients showe increases in BUN that were probably related to treatment wit GARAMYCIN Injectable. Of 20 increases probably or possibly relate to treatment, 7 were reversible, 9 occurred in terminal patients, an 4 had no follow-up.

Other adverse reactions associated with treatment were one instanc each of urticaria, decreased hematocrit, and reversible depressio of granulocytes with normal bone marrow. Other rarely reporte and possibly treatment-related adverse reactions were anemia, in creased reticulocyte count, rash, purpura, drug fever, hypotension convulsions, twitching, salivation, nausea, vomiting, increased trans aminase activity (SGOT or SGPT), increased serum bilirubin, de creased serum calcium, and joint pain.

Packaging: GARAMYCIN Injectable, 40 mg./cc., 2-cc. multiple-dos vials, for intramuscular administration.

For more complete prescribing details, consult package insert or Physicians' Desk Reference. Schering literature is also available from your Schering Representative or Medical Services Department, Schering Corporation, Union, New Jersey 07083.

AHFS CATEGORY 8:12.28 S-029



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Description: Sodium thiosulfate 25%; salicylic acid 1%; isopropyl alcohol 10%; propylene glycol; menthol; disodium edetate; colloidal alumina; purified water. *Indications:* For topical use in the treatment of tinea versicolor *(Malassezia furfur* infection). *Administration:* Thoroughly wash, rinse and dry the affected areas before application of medication. Apply a thin film of lotion twice a day or as directed. Although diagnostic evidence of the disease may disappear in a few days, it is advisable to continue the treatment for a much longer period. Clothing should be boiled to prevent reinfection. *Precautions:* If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes. *Supply:* 5-fl. oz. and new economy 12-fl. oz. plastic squeeze bottles.

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Comment

The Cover

The Scene:* A clearing in a remote part of the Everglades at afternoon on a spring day. It is the fourth day (Court Day; Fasting Day) of the annual Seminole Green Corn Dance. In the foreground the medicine man in ceremonial garb (turban, smock, ruffled epaulets, sash and tassels) squats, medicine pipe in hand, as he prepares to blow prayers ("songs") into the Black Drinks and at the same time name the members of the body so that each will be protected from disease. The first Black Drink (Button snakeroot, *Eryngium synchaetum,* steeped in cold water) and the second Black Drink (willow bark, *Salix amphibia,* steeped in cold water) are powerful emetics designed to purify the braves and prepare their stomachs to receive the green corn. Near the bowls containing these drinks are a partially stripped willow log and a bunch of Button snakeroot.

In the rear and to the right of the medicine man is the medicine fire built for boiling the third Black Drink or "Big Pot Drink." It is intended to protect the braves during the coming year from the diseases to which they will likely be exposed. Accordingly, the medicine man puts into this pot the herbs he believes are indicated by the diseases he judges the braves will encounter. Thus, the composition of this drink varies; it may contain as many as 15 different herbs. Regardless of the composition of the three drinks, it is believed that the potent purifying and protective powers are resident in the medicine man's breath and are imparted to the drinks as he blows his prayers into them through the medicine pipe.

To the rear and to the left of the medicine man the medicine bundle "is out." Wrapped in a deerskin, hair side out, and hung on the medicine pole are a varying number of items. Each is believed very important to the health and welfare of the tribe. These items (powders, horn, feathers, stones, etc.) may number 700 and each is separately wrapped in specially treated buckskin and tied with a thong. So powerful are these medicines that some must be handled with bone implements and women are not allowed to approach the bundle lest they be struck down. The medicine bundle's significance to the Seminole has been likened to that of the Ark of the Covenant to the Jew. If the medicine bundle is properly cared for, the tribe will prosper but if it is neglected the tribe will suffer and, indeed, sickness may spread from the medicine bundle itself.

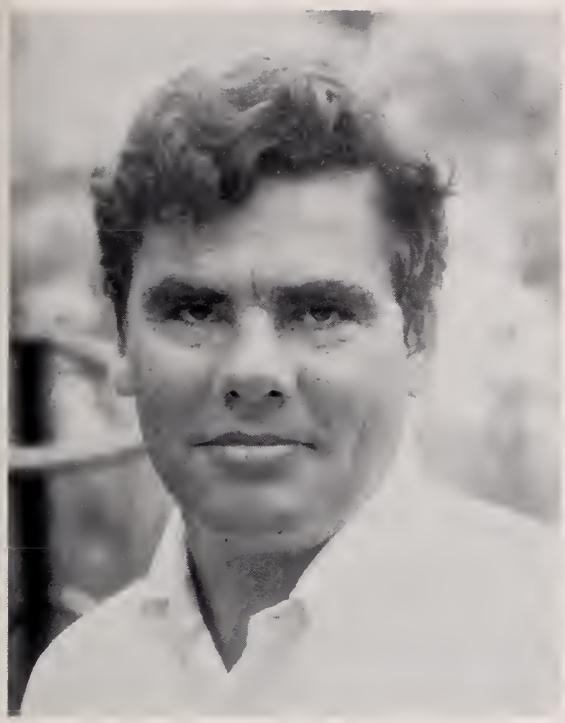
Behind the medicine man is a structure built especially for the meeting of the tribal council, the tchoc-ko thloc-ko. Here seated on logs, the elders discuss tribal affairs, preside over the Green Corn Dance, grant or deny marriages and divorces, sit in judgment on the wrongdoers of the preceding year and mete out the appropriate punishment.

*This scene is constructed from the description of the Cow Creek Seminole Green Corn Dance by Louis Capron: The Medicine Bundles of the Florida Seminole and the Green Corn Dance. Anthropological Paper 35, Bureau of American Ethnology Bulletin 151:1953.

Cover Artist

James Hutchinson is well known to Florida art connoisseurs as a master at portrayal of the Florida Seminoles and their life style. His paintings have been displayed at the Berlin Folk Festival, 1957, Florida Pavilion of the New York World's Fair, 1965, and featured in "The American Artist," 1965. He was the first artist to hold an exhibit in Florida State Museum.

Born in Buffalo, N.Y., he was taken at an early age to Massachusetts and California by his family before they settled in Stuart, Florida, when he was 14. He finished high school in Stuart, spent one year at the Palm Beach Junior College and one year at Florida State University; then enlisted in the United States Navy during the Korean War. When the war ended, he enrolled in the New York School of Illustration and Cartooning under auspices of the G.I. Bill. When asked what he considers the most valuable part of his art training, he quickly replies, "the two years I spent living in Beanie Backus' studio." Backus, another well-known Florida artist, is married to Hutchinson's sister.



Mr. Hutchinson

Since early life he has loved and admired the Seminoles of Florida. After his years with Backus and with the permission of the Seminole Council, he and his wife, Joan, lived for two years on the Brighton Reservation. Gradually they became accepted by the Indians and developed lasting friendships and a firsthand knowledge of Seminole ways. The two years ended and the need to earn a living forced them back to Port Salerno, Florida; however, they retain a lifelong campsite in a hammock near the former camp of Billy Bowlegs who befriended them. When time permits, they pack their gear and return to this spot for a few days.

Jim's life ambition is to paint a series of pictures that will capture and preserve the history and customs of the Florida Seminoles, intrepid warriors who would face starvation and harassment rather than be herded like cattle to Oklahoma. The traditions of these proud Indians are fast being lost as the elders die off and their descendants adopt the white man's way. In the portrait of a Seminole Medicine Man at the Green Corn Dance on our cover, Jim portrays one of the most significant moments in the life of the tribe.

Tree of Hippocrates



June graduates of the University of Florida College of Medicine recently honored the professor they believed best exemplified excellence in teaching during their medical school years. This year's recipient of the Hippocratic Award for Teaching Excellence is Dr. Melvin Greer (above left), professor and chief of neurology in the college. With Dr. Greer is 1970 class president, Bruce Neal Stewart from Winter Park. Dr. Greer's name has been inscribed on the bronze plaque which serves as a permanent record of the award winners. This award, which the students consider the highest honor a medical class can bestow upon a faculty member, was established last year and is presented to the teacher who, in the opinion of the students, most enriched their minds during their years in medical school.

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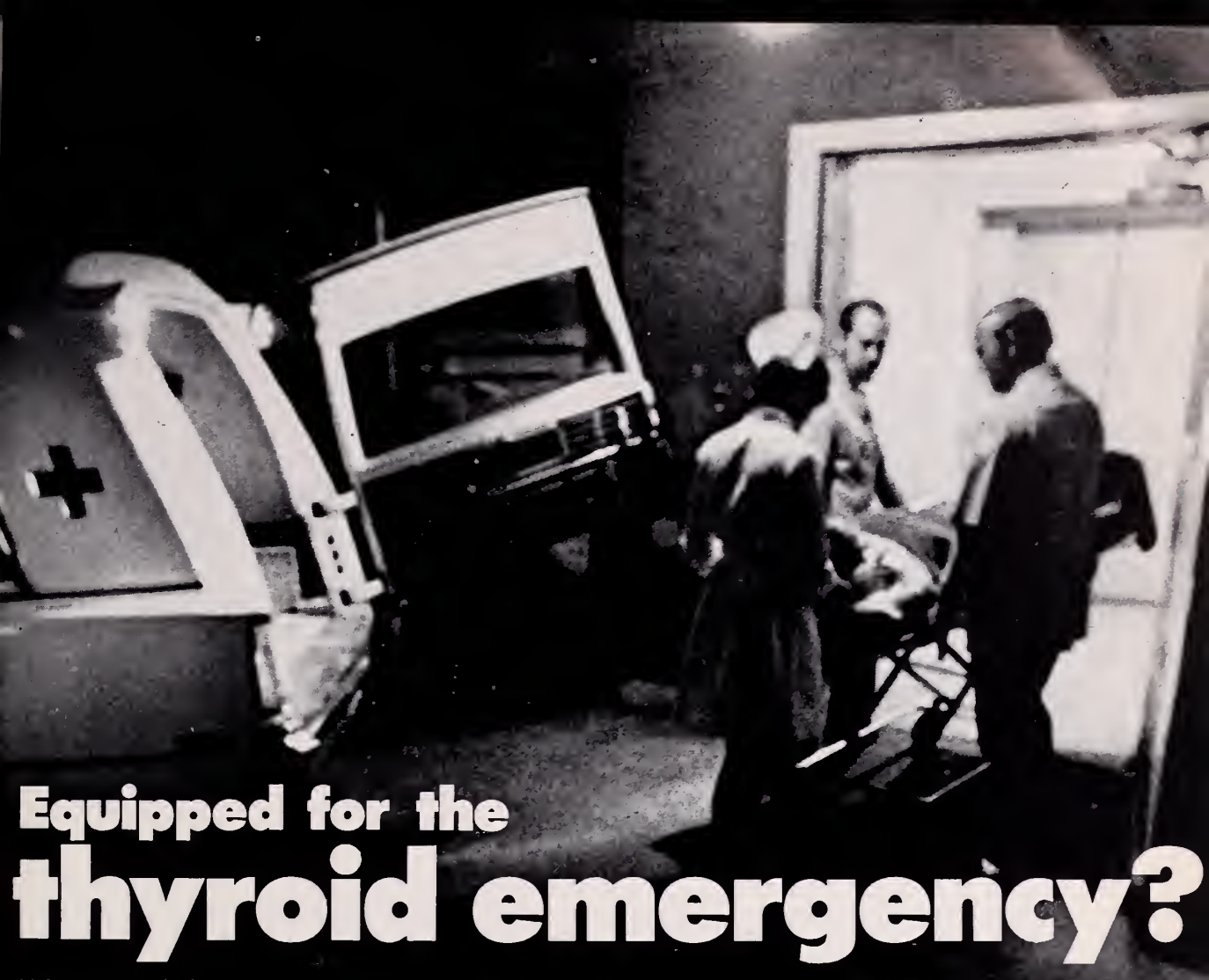
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Book Review

Essentials of Gastroenterology by J. Ned Smith Jr., M.D. Pp. 326. Price $14.75. Illustrated. St. Louis, The C. V. Moshy Company, 1969.

This book was written for a specific audience and the author is on target. It evolved from an outline that Dr. Smith prepared for his students at the University of Missouri School of Medicine. He enlarged on the original material and now makes it available to a larger audience of medical students and physicians in training. Of necessity, the field of gastroenterology is not covered in depth, but a surprising amount of information is presented in a concise manner. His writing style is smooth and makes for pleasant reading. Quotes from Alvarez, Osler, Crohn and others are sprinkled throughout the book adding spice to the text. Significantly, he begins with a quote from Osler that "the treatment of the patient is the most important element in the treatment of the disease . . .," a truism in the patient with GI disease, particularly. The importance of history taking is rightfully emphasized.

Beginning with the esophagus and proceeding distally, each organ is briefly discussed from the viewpoint of normal and abnormal function. The presentation on the liver suffers most from limitations of space but a definite plus feature are the excellently reproduced x-rays prepared by Dr. Kyo Lee which demonstrate the desired points clearly. If the discussions are brief, the references, both recent and past, provide leads to more extensive exploration of each subject. Treatment recommendations are conservative and Dr. Smith does not hesitate to express his personal preferences. This is a splendid introductory text for the neophyte in gastrointestinal diseases. For the more mature general reader who would avoid excessive strain on his inguinal rings lifting one of the heavier tomes, it can also be recommended.

RICHARD T. DONELAN, M.D.
JACKSONVILLE

The world is so full
  Of a number of things,
I'm sure we should all
  Be as happy as kings.

—*Robert Louis Stevenson*

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Company, 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. New York, Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Moshy Company, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) hy John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance hy Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Moshy Company, 1968.

Cooking For Your Celiac Child hy Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 hy Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science hy Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Moshy Company, 1969.

Medical Interviewing by Rohert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Moshy Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, puhlished hy the U.S. Department of Health, Education and Welfare, Puhlic Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Atlas of Human Electron Microscopy hy Ruhen P. Laguens and Cesar L.A. Gomez Dumm. Pp. 180. Illustrated. Price $20.50. St. Louis, The C. V. Moshy Company, 1969.

Plastic and Maxillofacial Trauma Symposium, Nicholas G. Georgiade, editor. Pp. 221. Price $25.00. 390 Illustrations. St. Louis, The C. V. Moshy Company, 1969.

A Synopsis of Contemporary Psychiatry hy George A. Ulett, M.D. and D. Wells Goodrich, M.D. Pp. 340. Price $9.50. St. Louis, The C. V. Moshy Company, 1969.

Genetics and Counseling in Medical Practice hy Leonard E. Reisman, M.D. and Adam P. Matheny Jr., Ph.D. Pp. 215. Price $12.75. Illustrated. St. Louis, The C. V. Moshy Company, 1969.

Infectious Diseases and General Medicine, Vol. III. Prepared and puhlished under the direction of Lieut. General Leonard D. Heaton. The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969.

Prematurity and the Obstetrician hy Denis Cavanagh, M.D. and M. R. Talisman, M.D. Pp. 542. Price $16.50. Illustrated. New York, Appleton-Century-Crofts, Division of Meredith Puhlishing Company, 1969.

Personnel Administration and Labor Relations in Health Care Facilities hy James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Moshy Company, 1969.

Davison's Compleat Pediatrician edited hy Jay M. Arena, M.D. 9th ed. Pp. 792. Price $19.50. Philadelphia, Lea & Fehiger, 1969.

Arrows of Mercy hy Philip Smith. Pp. 244. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Tobacco and Your Health: The Smoking Controversy by Harold S. Diehl, M.D. Pp. 271. Illustrated. Price $2.95. New York, McGraw-Hill Book Company, 1969.

Manic Depressive Illness hy George Winokur, M.D., Paul J. Clayton, M.D. and Theodore Reich, M.D. Pp. 186. Price $6.50. St. Louis, The C. V. Moshy Company, 1969.

War Surgery hy Camp H. M. Smith. Pp. 97. Department of Defense, Pacific Command, United States of America, 1969.

Synopsis of Obstetrics hy Charles E. McLennan, M.D. and Eugene C. Sandherg, M.D. Pp. 496. 212 illustrations. Price $9.50. St. Louis, The C. V. Mosby Company, 1970.

The Adolescent Patient hy William A. Daniel Jr., M.D. Pp. 444. 76 illustrations. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Spectroscopic Approaches to Biomolecular Conformation edited by D. W. Urry. Pp. 314. Illustrated. Price $15.00. Chicago, American Medical Association, 1970.

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Medical History

Seminole Indian Medicine

William M. Straight, M.D.

Today the Indians of Florida number approximately 1,400, having increased nearly tenfold since the close of the Seminole Wars in 1858.

In 1957 most of the Seminoles organized as The Seminole Tribe of Florida, Incorporated; this group now numbers over 1,000. In 1961 the Indians living along the Tamiami Trail, approximately 225, organized as The Miccosukee Tribe of Indians of Florida. In addition there are slightly over 100 unaffiliated Indians. They are rapidly adopting white man's culture in order to survive in the competitive society of south Florida. Today's Seminole works alongside the white man in jobs off the reservation or tends the store, farm, or cattle of Seminole owned enterprises, sends his children to public schools and consults the white doctor when he gets sick. However, it was not always thus and the following pages present the medicine of the Seminole in the days when the white doctor was taboo. It will be presented in the present tense as to a small degree some of these customs are still in use, and to give the narrative more interest.

. . . THERE ARE DOCTORS AND THERE ARE MEDICINE MEN

Among the Seminoles of Florida there are doctors and there are medicine men. The former are known in Miccosukee as ayikcomî: which is translated by Sturtevant as "medicine maker," and the latter are known as ayikomífŏ:sî: ("medicine's owner") or ayikcahica:ci: ("medicine keeper").[1]

The Seminole doctor may be either a man or woman. Most old people know some medicine so in a sense qualify as doctors but the term is usually reserved for those with a somewhat sophisticated knowledge of healing herbs and treatments. The female doctors, known as herb women or midwives, learn medicine informally from other midwives and sometimes from male doctors. In contrast to the male doctors they are not required to undergo fasting and rituals. Their practice is largely limited to the care of women, particularly as relates to menstrual disorders and childbirth, and occasionally to care for the male who is passing blood from the bowels or kidneys. The male doctors have no knowledge of bleeding diseases but the female is endowed by nature with a first-hand knowledge of these conditions.

Males who would be doctors must undergo formal training, "Doctor's School," including instruction and rituals of purification and dedication. Boys apply to one of the tribe doctors, most often a medicine man but not necessarily, and ask him to teach them. Josie Billie, medicine man of the Miccosukee Tribe, says only "good men" are accepted for training and only those the medicine man feels are capable of learning the art. One other requirement is that they not be married for as Josie says, "marriage ruin-em body." Details of the "Doctor's School" may be found in the article, "Josie Billie, Seminole Doctor, Medicine Man and Baptist Preacher," also appearing in this issue of the Journal. The teacher of this school receives no money but is customarily given presents by his students when the school session ends. As long as the student remains unmarried and the teacher will accept him, he can return year after year to "Doctor's School" for further instruction.

After "Doctor's School" the more serious students usually apprentice themselves to an older

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doctor, collect herbs for him, follow him on his rounds, and learn about the use of herbs. The identification, collection, preparation and use of herbs is not taught in "Doctor's School." Curing songs are taught in "Doctor's School," apprenticeship or from relatives. A doctor may refuse to reveal more powerful curing songs for his reputation often depends upon possession of these. Thus the doctors of the Seminoles have varying amounts of training, knowledge, ability and, perhaps most important, personal power.

. . . THE KEEPER OF THE BUNDLE

Being a medicine man is a different matter altogether for the medicine man is a politico-religious figure. Usually he is a doctor also, but there is no formal requirement that he be a doctor. The requisite intelligence, intellectual bent, emotional maturity, ability to take care of the sick members of the tribe and, above all, the personal force that he develops, all make a doctor the logical choice for medicine man. The medicine man occupies the highest ceremonial status in the Seminole Tribe. To attain this rank he must go through most, if not all, the lower ceremonial offices and must be recognized as the leader of his tribe. In his political role the medicine man was until recently the representative of the tribe in dealing with the other groups of Seminoles and with the white man. He attends the Green Corn Dance of the other Seminole groups and generally looks to the good of the tribe. It is he who selects the site for the annual Green Corn Dance of his tribe and supervises the arrangements and staging of it.

In his religious role the medicine man is the keeper of the medicine bundle. Greenlee[2] has defined the medicine man as one who possesses "a fragment of the old war medicine." According to tradition, the Supreme Being (Sa-kee tom-mas-see in Cow Creek; Fee-sa-kee-kee o-meek-chee in Miccosukee) sent the original medicine, perhaps eight or nine hundred different kinds[3] by his messenger, Es-te fas-ta. This original medicine bundle was given to the care of two medicine men and remained one bundle until the beginning of the Seminole War (1835-1842). Then "Little Chiefs" came to the medicine men according to Josie Billie and said, "Going on long trip, got to have some of that medicine."[3] The medicine men divided the single bundle, making up a number of little bundles, each containing a small amount of each of the medicines in the original bundle, for the chiefs to take with their war parties. Some of these were lost, some were taken west with the Seminoles who went to Oklahoma, and some were combined with other bundles. About 75 years ago Sturtevant[4] says there were nine medicine bundles of various sizes in Florida. Three of these were destroyed by fire and of the six remaining, one belonged to the Cow Creek and five were held by three Miccosukee medicine men at the time Sturtevant did his studies (1953). Although theoretically each medicine man holding a medicine bundle could hold his own Green Corn Dance, in actual practice the medicine men combine their efforts so that only three dances are staged each year—one at Brighton, one at Big Cypress, and one along the Tamiami Trail. Usually the medicine man will train an assistant from his own clan, and when he feels the assistant is sufficiently trained, he will pass his medicine bundle to him and retire to private life. Occasionally a medicine man dies in office, then the medicine bundle is placed in the hands of another medicine man for keeping until a man can be properly trained to take over its care. Customarily it takes seven years of training to properly qualify as a medicine man. The young Seminoles take little interest in the tradition of the medicine bundle and Frank Shore, medicine man of the Cow Creek Seminoles, says there are only four men with proper training and no one "coming up." He says, "I try to teach some people, but everybody too busy."[5]

The medicine in the medicine bundle is no longer used for its curative powers as it was in former years. Its value is chiefly symbolic and the significance of the medicine bundle to the Seminole has been compared to the significance of the Ark of the Covenant to the Jew. It is believed that if the bundle is properly cared for, the tribe will prosper but if it is neglected the tribe will suffer. Sickness may emanate from the neglected medicine bundle itself. The chief reason for the annual Green Corn Dance is to maintain life in the medicine bundle for it is believed that the power will die if several years are allowed to pass without a Green Corn Dance. On the contrary, if the bundle is properly cared for, during the night following Court Day (the fourth day of the Green Corn Dance) when the medicine "is out," Es-te fas-ta will from time to time add medicines to the bundle to assist the tribe in dangers that lie ahead.

The medicine bundle consists of many separate items; the number may vary from one bundle to another. Most but not all the items are separately wrapped in specially prepared buckskin and wound around with a thong. This buckskin must

be taken from a young buck, incompletely tanned by a man (most tanning is done by women) who has fasted during the procedure and the hair removed. A few items are left unwrapped or are wrapped in cloth. If the medicine man dies, new buckskin is prepared with proper ceremony and each item is transferred to the new wrappings. The skin that encompasses the bundle at the annual Green Corn Dance is considered a temporary cover and is a borrowed deerskin with the hair intact and apparently not prepared with any particular ceremony.

The medicine bundle is displayed for only one period of 24 hours each year, on Court Day of the Green Corn Dance. During the rest of the year it is in the keeping of the medicine man. Capron[3] believes the medicine man keeps it at his camp, but Sturtevant[1] emphatically states that between busks it is kept in a specially built wooden structure often covered with a tarpaulin in a secret spot in the woods. A few days before the Green Corn Dance, the medicine man moves the medicine bundle to a well-hidden spot in the woods east of the cleared area where the dance is to be held.

Before sunrise on Court Day the medicine man and his assistants cross the dance ground walking east into a marsh. There they bathe and the medicine man rubs water all over his body while singing a song asking God (Fee-sa kee-kee o-meek-chee in Miccosukee; Sa-kee tom-mas-see in Cow Creek) to keep the medicine from harming him and to let him use it for the good of the tribe. They reclothe and the medicine man's assistant continues east out of sight into the woods carrying with him an empty deerskin. After a period of time he returns with the bundle wrapped in the deerskin, the legs of which have been tied loosely to make a basket with a handle. The bundle is placed on the ground just off the dance circle and the medicine man or his assistant squats facing east, unwraps the bundle then carefully unwraps and examines each individual item, rewraps the items one by one winding the thong about them and transferring each to fresh deerskin. When this is completed the new deerskin is folded over to encompass the medicine, the legs are tied to make a handle and the bundle is hung on a forked stick, the medicine pole, where it will remain until evening of that day. About twilight the medicine man and his assistant clear, level and sweep a place east of the dance circle where they will sit all night. The assistant then goes to within three feet of the medicine pole and with proper incantations and gestures addresses the medicine. From the bundle he removes the "fire flint" which he takes to a newly laid fire nearby and with which he ignites the medicine fire. The flint is rewrapped in its buckskin and left near the fire. The assistant returns to the medicine pole, again addresses the bundle with prayers, songs, and gestures, removes it from the pole and brings it near the medicine fire, the "fire flint" is replaced in the bundle and the bundle closed.

The assistant now makes the rounds of the clan camps to collect "private medicines" whose owners want them placed with the medicine bundle to enhance their potency. (In one instance Capron saw a rifle placed with the medicine bundle to give it "supernatural accuracy"). Also certain herbs may be placed near the medicine bundle to improve their efficacy: Button snakeroot, ginseng, Red Bay, Southern Red Cedar, and sassafras. These items are not wrapped in the deerskin with the medicine but set against it. The whole is then covered with a tarp. During the ensuing hours the medicine man and his assistant anoint their bodies with the black drinks. Throughout the night they sit by the medicine bundle and fire keeping track of the dances. At midnight they swallow the boiled black drink four times.

With the coming of the dawn, the women leave the dance ground and the medicine man presides over the final purification rites, the scratching and the sweat bath. While these are in progress, he takes from the medicine bundle a small pipe and tobacco wrapped in a red cloth, smokes it for a few minutes sitting facing west, then returns it to the bundle. He then unwraps the bundle completely and each item individually to determine if Es-te fas-ta has added any new medicines. Indians drift by to watch the procedure and to reclaim any "private medicines" they may have left to be put with the medicine bundle. Having carefully studied and rewrapped each item, the medicine man transfers them to another fresh deerskin, closes the deerskin around them and carries the bundle east until he disappears in the woods. Later the medicine man returns empty handed, his assistant gives a signal and the feast begins; the Green Corn Dance is over.

. . . BUNDLES DIFFER

There is disagreement as to the number of items in each medicine bundle. Sturtevant's informant, Josie Billie, says "about forty."[4] but Capron says there may be 600 or 700 different items.[3] No one has been able to get a complete catalogue of all the items in any one bundle.

Sturtevant[4] discusses some two dozen items which are known to Capron and himself, but here we will mention and illustrate only the different types of medicines known to be in either the Miccosukee or Cow Creek bundles. Initially the objects in the bundles had to do with warfare and Sturtevant divides these into those used for offensive magic, those for defensive purposes, and those used to cure wounds incurred in warfare.

In the category of offensive magic is the "Thunder Missile," a spherical, transparent, crystal-like object three-quarters of an inch in diameter which was reputed to make the enemy become excited, as one feels during a thunderstorm. According to Capron, this item was to make the Indians invisible to the enemy. Another such item is the "Living Medicine," a reddish or white powder which the medicine man could use to capture the souls of sleeping enemy and thus make them vulnerable when they awakened.

Of the defensive medicines perhaps the most dramatic is the "Small Stone" which was used to ward off bullets. The medicine man could place it between his people and the enemy, sing appropriate songs, walk around it four times shaking a rattle, and it magically increased in size forming a shield so that the enemy bullets glanced off and his people were protected.

Of the therapeutic items used in war there was the "Shot Medicine," a silvery powder which reputedly could revive someone killed by a bullet. Another medicine is labelled by Capron's informant as the "shot-in-the-heart medicine" and this seems to have been ginseng. Although this is not found in south Florida, it used to grow in north Florida and is now imported from Oklahoma. In the medicine bundle ginseng is kept wrapped in white cloth in contrast to the usual buckskin wrappings. Still another therapeutic item is a buzzard feather quill with a soft wooden stopper which contains fine bits of feathery material called "Buzzard's Down," that stops bleeding when minute amounts are placed in a gunshot wound.

In addition to items used in warfare there are hunting charms such as the "left-hand horn of the Snake King." This was, according to tradition, broken off the king snake by an Indian who charmed the snake from under a rock, aimed a stone at the more powerful right-hand blue horn and missed, breaking off the less powerful left-hand horn. The possession of this charm and the singing of its song attracts deer. Some are ceremonial items such as the "fire flint" about which we have spoken and the "Little Tube," a small whistle made of cane or bone which is used to signal the sweat bath ritual.

Some of the medicines in the bundle are thought to be so powerful they cannot be touched and bone implements are provided for handling them. Thus one of the bits of horn in the bundle that is known as ee-ah-pee was said to be so powerful that the medicine man, Sam Jones, was afraid of it. Sam Tommie speaking of this says, "Every time he (Sam Jones) touch it his hand swell up and get sore. At's the worst horn Sam got. He think he just take care of it. Keep it in bag. Bring it out every four years. He doan know what it's good for. He doan touch it. He pick it up with sticks—like this."[3] So powerful are some of the powders that a goose quill is provided to scoop them up if they should be spilled. Finally, women are not allowed to come near the medicine bundle for they would surely be knocked down by it.

As noted previously, one of the major responsibilities of the Seminole medicine man is to stage the annual Green Corn Dance. He must set the date, select the site, make all the arrangements, and personally see that everything goes off properly. The Green Corn Dance has two purposes: first, to preserve the life of the medicine bundle and, second, to insure health to the individuals of the tribe; more immediately it is to prepare the males to eat the green corn. In former years this was the sacrosanct religious observance of the Seminoles and it was always held in a very secluded spot. No white man was allowed to witness this ceremonial until the 1930's. More recently both white men and women have been allowed to attend and Smiley[6] says it has largely degenerated into a social occasion with plenty of wyomee (liquor) for all. It is held in the spring of the year and the dates on which it is known to have been held range from late April to mid-July.

. . . ANNUAL PURIFICATION AND RENEWAL

For those interested in all of the details of the Green Corn Dance the reader is referred to the exhaustive article by Capron.[3] The next several paragraphs will discuss only those aspects of it related directly to health: primarily the black drink ritual and the scratching of the males. There are three "Black Drinks" which are swallowed, rubbed on the body, and poured on the hot stones of the sweat bath. The first two are designed to purify the males and prepare their stomachs to receive the green corn and the third is an attempt at preventive medicine.

The first of the black drinks is a cold water infusion of the chopped up tubers of Button snakeroot *(Eryngium synchaetum)* prepared by the medicine man's helper on the morning of Court Day. This is a very bitter emetic and is used by the medicine man apart from the black drink ritual: as heart medicine, in treatment of a criminal wishing to get back his tribal privileges, and to insure life. If anyone will eat three roots given him by the medicine man with appropriate ceremonies, he will not die within five years according to Capron.[3]

The second black drink is also prepared as a cold infusion by lining the inside of a bowl with vertically placed strips of the inner bark of the willow *(Salix amphibia)* and pouring cold water into the bowl. Although this is done by the medicine man's helpers, the medicine man himself or his assistants then "blow prayers" into this bowl through the medicine pipe. The medicine pipe is fashioned from a cattail; it is about three feet long and has three wrappings of red cloth variously said to symbolize blood and to prevent female diseases in males, i.e., bloody dysentery. Josie Billie told Capron that in preparation of this drink as he blew prayers into it through the medicine pipe, he named over each part of the body so that when the Indian rubbed it on, each part would be protected. Both of these are drunk during the afternoon of Court Day. As they are both powerful emetics, the males down them and quickly head for the bushes to vomit. Somehow they always seem to reach a spot of privacy for they are never seen to vomit in public.

The third black drink or big pot drink is prepared in the late afternoon of Court Day by the medicine man and his assistants and boils on the medicine fire until midnight. Its purpose is to protect the Indians from the diseases the medicine man forsees they will encounter during the coming year. Thus the ingredients vary from year to year and may number 15 or 16 different herbs. Some of the herbs mentioned by Capron[3] are: St. John's wort, Red Bay, Blueberry, Sweet Bay, Rabbit tobacco and ginseng. Still other ingredients are mentioned by Sturtevant[4] including four ears of roasted green corn. Each of the males must take four drinks of this big pot drink at midnight and if he doesn't spontaneously vomit, he must gag himself. The quantity of the drink left over is then poured on the hot stones of the sweat bath the following morning. Sturtevant[4] states, "The medicine prevents the green corn from making the men sick, is sort of a general tonic, making the body strong and healthy, and also prevents gossiping and 'craziness' and keeps the people 'friendly, rejoicing' during the ensuing year."

The final rituals of the Green Corn Dance which relate to health are the scratching and the sweat bath. The scratching has been said to "purify the blood and prevent blood poison" and to be required because "the blood becomes 'too heavy' and must be 'let out' " to ensure healthiness. It would seem to be a symbolic bloodletting. Only the males are scratched for the women have monthly menstrual cycles that spontaneously purify them. Since the fast must be maintained until after the scratching ceremony, the young boys who are not expected to fast the whole period and men who for some reason cannot stay until the end of the festivities are scratched on the morning of Court Day. Most of the men and older boys are scratched on the morning after Court Day, Feast Day. The scratching consists of two long strokes on the front and two on the back of each upper and lower arm; two on the front and back of each thigh and lower leg; two diagonal strokes on each breast and two diagonal strokes on each side of the back. All men are scratched even if it is necessary to send the medicine man's helpers to drag out the laggards and those that are drunk. The instrument used was at one time a bone set with garfish teeth but more recently it has been sewing needles simply held in the hand, stuck through a block of wood, or through a rectangular frame made of a turkey quill. The skin is wet to keep it from "peeling" and the scratches are just deep enough to draw an ooze of blood. The scratching is done simultaneously by six or eight men, the older scratching the older and the younger scratching the younger. There is much laughter and good natured bantering associated with occasional yips of pain when the needles bite too deep.

During the early morning of Feast Day the sweat bath has been prepared by sinking two saplings in the ground and bending them over to make intersecting semicircular ridge poles over which a tarpaulin is fastened. When 15 or 20 men have finished their scratching, they move into this sweat bath (about eight feet in diameter and four feet high), stones which have been heating on the nearby sweat bath fire are handed in, and the remainder of the big pot drink is thrown on the stones producing billows of steam issuing from the leaks in the sweat lodge. After three or four minutes of this the men burst out glistening with

sweat and dash into the nearby slough for a bath. Others who have finished the scratching but have not taken the sweat bath join them in the slough for bathing. If the timing has been just right, about this time the medicine man will be returning from the woods having hidden the medicine bundle, the first rays of the sunrise will be streaking the sky, and the fast is over. The women will file in with great trays of food and Feast Day has begun.

. . . DISEASE, A LOSS OF SOUL

In the remaining pages, we will turn our attention to the Seminole ideas of the cause of disease and therapeutic measures to be undertaken.

The most common answer one gets if he inquires the cause of disease is the "loss of soul." The Seminole believes in a double soul,[1] the parts of which are united in the body when the Indian is healthy and are again united four days after death. One portion of the soul is called nõ:ckî: and is identified with the breath; this remains in the body until after death. The other portion is located in the heart and is called solŏ:pī: and according to Capron[3] leaves the body via the anus wandering far and wide and experiencing adventures which the Indian perceives as dreams. Characteristically this portion of the soul goes North "where Indians born and raised" and where there are many abandoned towns inhabited by ghosts. These ghosts, usually of the opposite sex, prevail upon the soul to remain. If the soul returns to the Indian's body at daybreak nothing happens and the Indian remains well. However, if the wandering soul becomes enamoured of a pretty ghost and fails to return, the Indian becomes sick. The soul is said to go first North then around to East. If it gets fully to the East, it may then cross the heavens on the Milky Way and when it arrives at the West, the Indian dies. Four days after death the other portion of the soul joins the first portion and the wake is over.

The doctor attempts with his songs to follow the errant soul and lure it back to the Indian's body. If he is successful, the Indian recovers, but if he is not successful, the Indian dies. To be efficacious, roots must be gathered from the North or East sides of the plant, and in the curing songs there is repetition of the points of the compass always in the sequence North, East, South, and West. These are thought to be explained by the theory that the soul goes first North, then East and finally West. Although this theory taught on the second day of "Doctor's School" seems consistent, Sturtevant[1] feels it is not used to explain specific diseases. Soul loss may be brought about by means other than the nocturnal wandering just described. Thus the medicine man can steal the souls of sleeping enemy using medicines in the medicine bundle; sorcery may be used to call the soul of the victim and burn it with an image; and finally, the ghost of a recently dead person may lure away the soul of a relative. Indeed, when an Indian dies in a camp, the clan must move and reestablish their homes at another site lest others of the clan sicken and die. This has also been given as the reason a woman in labor leaves the camp, journeys into the woods accompanied by a midwife, and remains until the baby is born for the baby's death would necessitate the whole camp being moved.

Diseases are also thought to be due to various agents. Thus diseases may be caused by mammals, birds, fish, reptiles, worms, shells, mosquitoes, chameleons, lizards, snakes, bears, monkeys, spiders, and certain plants. Natural phenomena such as fire, thunder and rainbows may cause disease. Some diseases are thought to be caused by supernatural beings and others by social misbehavior such as adultery and too close association with a menstruating woman. Snake bite may be caused by violating the taboos of the Hunting Dance, indeed the major purpose of the Hunting Dance, a ceremonial held in the fall, is to placate the snakes and protect the dancers. Disobedience of, disrespect for, or gossiping about the doctor who has cured you may bring a recurrence of the disease.

When asked how these agents cause disease, the Seminole doctor speaks vaguely about the agent somehow getting inside or on top of the body. With some diseases a "smell" may enter the lungs unknown to the patient and bring about the disease in a magical, not a mechanical way. Sometimes diseases are associated with a given agent because the symptoms in some way resemble some attribute of that agent. Thus digestive upsets are thought caused by cows for they chew their cuds and regurgitate. Diarrhea is associated with birds because bird droppings are liquid.

At least in the past sorcery was a cause of disease, and Seminole medicine men knew malevolent songs and were suspected of sorcery. The usual technique was to treat food, liquor, or cigarettes by singing the appropriate songs over them. The victim then consumes the item, sickens and possibly dies; also the sorcerer might assume the form of an animal that sucked the blood of the

sleeping victim until he sickened and died. Sorcerers could with appropriate ritual cause lightening to strike the victim down or cause the hunting Indian's gun to go off and kill him. Finally, sorcerers might shoot objects, hair, charcoal, needles, or ravellings of cloth, for example, into their victim and cause illness. In such instances the doctor was expected to suck the offending object out, then take an emetic to rid himself of it.

Other diseases caused by instrusive objects were such as the "Little People Sickness." In this, supernatural beings are thought to shoot cobwebs into the sick one. These must be removed by the doctor using the cupping horn. In rheumatism a feather, hair, or pebble may have been shot into the victim and the doctor is expected to suck it out.

Dreams are usually not the cause of disease but are looked upon as omens. However, there are exceptions to this such as the "Fire Sickness"; if one dreams of fire he will develop a fever. Dreaming of many deer may produce the "Deer Sickness" or of a house full of animals, the "Cat Sickness." Dreaming of "a lot of pretty girls, be sweet to you and kiss" according to Josie Billie is a warning you're going to catch a bad cold and fever. Dreaming of hunting animals indicates a desire to learn, i.e., to hunt knowledge.

Finally, there are empirical causes of illness such as knife or bullet wounds or injuries from falls and snakebites. Certain diseases such as colds, coughs, and chronic fevers are not ascribed to specific causes.

Diagnosis is chiefly based on history taking, although the doctor may perform cursory examinations in certain circumstances. He may also examine the stool to determine which animal's stool it resembles. Sometimes a relative or friend goes to the doctor and describes the patient's illness, whereupon the doctor makes his diagnosis and prescribes.

. . . THE SONG'S THE THING

The Seminole doctor's therapeutic armamentarium consists of curing songs, herbs, bloodletting, sweat baths, and dietary restrictions. Although the doctor uses herbs (Josie Billie is said to have knowledge of more than 225 herbs), it is thought that the herb is incidental and treats the symptoms only while the curing song or spoken spell gets at the cause of the disease and cures it.[1] Indeed, Josie Billie told Sturtevant that he could chant a curing song and blow his breath into a pot of plain water and make it efficacious in the cure of disease.

The doctor to be successful in his cures must have "living medicine" within his body. Some doctors possess this to a greater degree than others. It is this power within them that they breathe through the medicine pipe into the pot of medicine or upon the dry herbs held in their hand. It is this power that makes the herbs efficacious, and this power is inhaled by the patient in some magical way. This "living medicine" is given by the teacher to the "worthy" students in Doctor's School. The teacher sends the students to select a plant he designates, they return with it, he prepares it singing over it and blowing into it, the students then swallow it, and it becomes alive within them. However, to keep this "living medicine" alive within him the doctor must undergo one day fasts and take certain medicines every month or two. He must also be alert to avoid situations that might damage his "living medicine." Thus he must avoid contact with menstruating women, treating a woman during mourning, and having coitus with his wife in less than four months after she has borne a child. If the patient he is treating dies, the doctor must purify himself by taking the black drink and waiting two weeks before he resumes practice, or if he does not take the black drink, he must wait four months before resuming practice.[1,2]

A number of the curing songs have been recorded and translated by anthropologists who have worked with the Seminoles. They consist of many words difficult to translate, but often have repetition of the cardinal points of the compass: north, east, south, and west in that order, or the colors yellow, red, black, and white. At times there is reference to the supposed causative agent or the imitation of the cry of the animal or bird that seems related to the illness. Occasionally, as in the "Bear Sickness," the bear is described as moving away, or in the "Sun Sickness," the toad is summoned to swallow the Sun. But for the most part, Sturtevant could find little relationship between the words of the curing song and the illness to be cured. The song is uttered by the doctor in a rapid, barely audible mumble and if he makes a mistake in the recitation, he must stop and begin all over again. Despite this there are variations in the same song from doctor to doctor.

The herbs to be used are usually gathered fresh at the time of the illness; medicines are not kept in stock although the doctor may keep a small stock of herbs that are not available locally. In former times these were kept in specially woven medicine pouches but now bags, tins, and card-

board boxes suffice. Usually the doctor instructs the patient or his relatives what plants he needs and where to find them, then the patient or relative brings them to the doctor. Occasionally, when for one reason or another this will not work, the doctor collects the herbs himself. A few plants such as ginseng and sassafras, which are no longer obtainable in Florida, are brought in from Oklahoma. The only domesticated plants in use are tobacco and the gourd.

Medicine is made from all parts of the plant but most commonly used are the roots and leaves in that order. To be most efficacious the roots and leaves must come from the north or east sides of the plant. Leaves from the south or west sides of the plant are thought to bring bad luck and even death. Some herbs such as cedar leaves are thought to be such strong medicine that the collector must fast the day he collects them lest they harm him.

Sturtevant[1] analyzed the ingredients in 80 different Miccosukee herb remedies and lists the most frequently utilized plants in order of decreasing frequency as follows:

TABLE OF HERBS MOST COMMONLY USED BY THE MICCOSUKEE SEMINOLE[1]

Bay leaves	*Persea borbonia*	25	times
Cedar	*Juniperus cilicicola*	11	"
Sassafras	*Sassafras albidum*	10	"
Southern willow	*Salix amphibia*	8	"
Ginseng	*Panax quinquefolium*	6	"
Lizard's tail	*Saururus cernuus*	6	"
Button snakeroot	*Eryngium synchaetum*	5	"
Common buttonbush	*Cephalanthus occidentalis*	5	"
Downy milk pea	*Galactia volubilis*	4	"
Royal fern	*Osmunda regalis*	4	"
Beard fern	*Vittaria lineata*	4	"
Serpent fern	*Phlebodium aureum*	4	"
Frost-weed	*Verbesina virginica*	4	"
Gopher-apple	*Chrysobalanus oblongifolius*	4	"
Huckleberry	*Vaccinium myrsinites*	4	"
Spike-sedge	*Eleocharis caribaea*	4	"

The first four herbs in this list are all emetics emphasizing the importance the Seminole doctor places on "puking" as a remedy. Josie Billie once remarked that emetics were to the Indian what laxatives are to the white man. Bay leaves and Button snakeroot are the cure-alls of Seminole medicine; Josie remarked that Bay leaves are "good for everything." Among the Cow Creek Seminoles, Button snakeroot and sassafras are the most commonly used herbs and are thought so effective that they need not be sung over. Sturtevant could find very little reason for the employment of a given herb in a given disease except that it was traditional. Medicine made from the herbs may be taken internally, applied externally, used to steam the body (as in the sweat bath), used as a steam inhalation, or used in a combination of these methods.

During the preparation of the herbs the doctor must abstain from eating meat and fish if the medicine is to be effective. In most instances there are careful instructions about the preparation of the herbs and by what route they are to be given; but often the time of administration, dose to be used and frequency of administration are not noted. Typically, the patient or his relative collects the herbs and brings them to the doctor. The doctor prepares the herbs and at the appropriate time rinses his mouth with water before singing the curing song. The song is sung over the dry herbs held in his hand, or if an infusion, tea or broth is blown through the medicine pipe, the end of which is just under the surface of the liquid. During this procedure the doctor must always face east, "because the moon and the sun arise in the east."*[1] After the preparation of the medicine it is given to the patient with instructions for its use and the doctor or patient departs. If the patient doesn't improve, the doctor may take him to another doctor "for a consultation" or the patient may on his own consult another doctor. Indeed, it is not unusual for the patient to consult several doctors and take simultaneously the medicines prepared by each, believing that if one medicine doesn't work another will. During the past 50 years Seminole doctors have become less reluctant to seek the aid of the white doctor when their efforts were not meeting with success. Thus Dr. M. Sewell Pender, the only physician in Collier County during the early 1930's, recalls Josie Billie bringing as many as 20 patients at a time during a malaria epidemic about 1934.

Other less frequently used methods of treatment were bloodletting, the sweat bath, and dietary restrictions. Bloodletting is used in the treatment of five diseases; it is not used in snakebite as one might reasonably expect. The doctor has bull's horns (originally Buffalo's horn) of various sizes with a small hole near the horn's tip. First, he puts a bit of an unidentified root known as "bitter medicine" in his mouth, then spits on the skin at the site chosen for the incision, cuts the skin to sufficient depth with a piece of broken glass and applies the large end of the horn. He puts his mouth to the small hole and sucks vigor-

*Mention has been made previously of the soul wandering concept and the theory that if the soul gets due east it will walk the Milky Way to the west and the patient die. For this reason the sick Indian must always lie with his head to the east for if he lies with his head to the west, he may well die. When the Seminole lies down to sleep at night (but not necessarily during the day), he is careful to lie with his head to the east. Seminoles are customarily buried with their heads to the west.

ously and when the horn fills with blood, he quickly slips his finger over the small hole and takes the horn with its contents away from the patient's skin. By repeating this procedure several times Josie Billie says a pint of blood can be removed from a satisfactory incision. Sometimes the horn is placed over an accidental cut and suction applied to draw blood into the area rather than from the patient. The sweat bath is primarily a ceremonial procedure, though it is used to treat certain kinds of pain and one type of insanity.

. . . DON'T EAT DEER BRAINS

Another uncommon therapeutic measure is dietary restriction. For example, the meat of an animal thought to cause a sickness is interdicted for a period of time. Thus Indians suffering from the "Deer Sickness" must not eat venison for four months, and those suffering from the "Hog Sickness" must not eat pork for the same period. Some foods are abstained from because they are thought to be harmful; for example, deer brains must never be eaten by the male for in the words of Josie Billie, "kill-em peter."

Other food taboos relate to potentially polluting individuals. Women during their mense may cook the food but may not eat at the table. The mother may not eat at the common table for four months after the birth of her child, and the widow or widower for four months after the death of their spouse.

Both Greenlee[2] and Sturtevant[1] detail a number of "clinical syndromes" and their treatment. One of these follows to give the reader the idea of the Seminole text of medicine. The *"Bird Sickness"* (fõ:sacŏ:kinokă:cícihcî:) is caused by birds in general and specifically such birds as the horned owl, the American egret, the snowy egret, and the white ibis ("curlew"). Babies are particularly susceptible to the bird sickness and have diarrhea with thin greenish stools, vomit after nursing, urinate immediately after taking liquids and grow thin. They may make noises resembling bird calls. The doctor examines the stool for the characteristic appearance. Adults may also be affected and have similar stools, vomiting, anorexia, make bird noises and dream of birds. This is treated with a medicine made from the whole plant of the pinweed *(Lechea minor)* and leaves from the east side of the bay *(Persea borbonia)* boiled in water. With more severe cases in adults the roots of rattlesnake-master *(Liatris laxa)* and queen's-delight *(Stillingia angustifolia)* are added. The patient drinks the medicine and washes the whole body with it. Adults are also forbidden to eat the meat of migratory birds for a period of time. Sturtevant[1] gives the curing song which the doctor blows into the pot. This refers to the horned owl's eyes running like an open boil, apparently an allusion to the diarrhea. It also contains the cycle of the colors as previously mentioned.

A note about the doctor's fee will close this narrative. We have previously noted that the teacher in "Doctor's School" makes no charge for imparting his knowledge. Furthermore, Josie Billie points out that the Great Being gives man the herbs for nothing, therefore the doctor must not charge for their use. Although the doctor may not take money for his services, it is customary for the patient to give the doctor a gift. It is important that the doctor not seem too eager for this gift and the gift is not usually given immediately, unless the doctor or the patient has come from a considerable distance, making it difficult to transmit the gift at a later date. The gift may be a few yards of colored cloth (all one color), an article of clothing, a pocket-knife, saleable trading goods, or live or dead domestic animals such as a chicken or hog. If the gift is a living animal, the illness is in some fashion transferred to the animal and when the doctor kills it he must eat certain prescribed parts of it; for example, if the doctor receives a live hog, he must eat the "long liver" (spleen). The doctor is at liberty to sell or trade the gift and thus convert it into money. Despite the dictum among the Florida Seminoles that the doctor not accept money, Josie Billie on his annual trips to Oklahoma used to accept four or five dollars for treating an illness and apply this to the expense of making the trip.

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Government Medical Service To The Seminole Indians

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In 1930 Dr. W. C. Rentz of Miami was placed under contract by the Bureau of Indian Affairs at a salary of $75 per month to render services to the Seminoles (which included those now known as Miccosukees). This man practically became the father of these people, concerned not only with the practice of medicine but also furnishing them moral support and advice. He made home visits and delivered their babies in the chickees (thatch roofed huts), which were, and in many cases still are, their homes. In 1934 Miss Charlotte Conrad, a Public Health Nurse, was appointed by the Bureau of Indian Affairs to make home visits and see to the health needs of the Seminoles.

On July 1, 1955, responsibility for providing medical care and health services to the Indians was transferred from the Bureau of Indian Affairs to the Indian Health Service, which is a part of the Department of Health, Education, and Welfare. The Indian Health Service contracted with the Florida State Board of Health and two outpatient clinics were established: one at the Big Cypress Reservation and the other at the Brighton Reservation. These clinics are held twice a week. During July, 1968, I was appointed Service Unit Director for the State of Florida to work on Health Education, Health Plans and Preventive Medicine. An outpatient clinic was established at that time and for the first time on the Miccosukee Reservation. In this manner we had a clinic on each reservation except Hollywood; this reservation is located in an urban area and the Indians consult two contract physicians at their offices. The contract between the Indian Health Service and the Florida State Board of Health covers the use of some of their facilities, the furnishing of a physician for the Brighton clinic, and the handling of administrative affairs of our contracted medical care. Dr. Billy Rentz and his associates in Miami are the contract physicians for the members of the Miccosukee Tribe. The hospital contracted is the Baptist Hospital, also in Miami. Dr. Billy Rentz is the son of Dr. W. C. Rentz mentioned at the beginning of this article. He, as his father, is also very popular with the Miccosukees.

The following Clewiston physicians contract to handle the members of the Big Cypress and Brighton Reservations: H. W. Shupe, M.D., J. D. Forbes, M.D., E. B. McConville, M.D., and W. O. Rigby, M.D., and the hospital under contract is the Hendry General Hospital. As aforementioned, there is no outpatient clinic at the Hollywood Reservation. Services are strictly under contract basis to J. P. Boettner, M.D. and R. Rogers Jr., M.D. The patients are taken to Broward Medical Center in Fort Lauderdale for hospitalization. Dental care of the children in Miccosukee Reservations is handled by the Dade County Health Department; dental care of the children on the Hollywood Reservation is handled by the following dentists: Richard L. Stanley, D.D.S., M. J. Dixon, D.D.S., and R. G. Mayhill, D.D.S., and dental care of the children on the Big Cypress and Brighton Reservations is handled by George R. Randolph, D.D.S. and Ottis E. James, D.D.S. We have approximately 75 children enrolled in the "Head Start Program" at the four reservations. I am personally responsible for a biannual complete physical examination and evaluation of these children. Once a year a board certified pediatrician examines their records with me.

Community Profile

The Florida Service Unit covers the reservations of the Seminole Tribe of Florida: Brighton, consisting of 36,000 acres in Glades County; Big Cypress, 42,700 acres in the Everglades in Hendry County; Hollywood, 480 acres in Broward County, and the Miccosukee Tribe of Indians of Florida (kin to Seminole) scattered along the Tamiami Trail near Forty-Mile Bend and occupying 330 acres in Dade and Collier Counties. The land in these South Florida areas is flat; in Glades, Hendry and Collier Counties it is rough and the greater part is undeveloped; some of it is under water the better part of each year. The temperature average year-round is 75°, with a summer

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Figure 1—Reprinted by permission from the National Geographic, November 1969.

82°, and perhaps eight or ten days in the winter in which it reaches below 45° at nighttime; what is known as a Florida "cold snap." The average annual rainfall is 62 inches—most of it in the summer through late fall.

Tribal statistics show an enrolled membership at present of 1,300 (Seminole 1,060, Miccosukee 240) plus about 100 not yet enrolled but living on or close to the reservations, making a total population of 1,400 with which we are directly involved. There are others living in scattered areas of the state. The population is somewhat mobile, with a recent trend of moving from Brighton and Big Cypress to the more urban area of the Hollywood Reservation for access to more employment and better paying jobs.

Two Indian languages are spoken among the Seminoles. The people on the Brighton Reservation speak Cow Creek (Muskogean); Big Cypress people speak the Miccosukee tongue; and Hollywood residents speak both or either. Numerically about two-thirds speak Miccosukee and one-third Cow Creek. A few more than one hundred of both tribes speak both tongues. Many of these Indian people also speak English, especially those of about 45 years of age or younger.

The Seminole population has grown approximately 25% in the past six years and almost 300% in the past 35 years. There were known to be approximately 500 Seminole/Miccosukee Indians in Florida in 1935; there are now about 1,400 and most of them are full blood Indians. The sex ratio is almost equally divided. There is a very slowly growing tendency for marriages with whites.

Education

Illiteracy has left the Seminoles and Miccosukees far behind. The small child starts school, usually with a language handicap, lack of home training, health training, and from a very different home environment. Preschool training has become

a necessity, and this is being taken care of through the Head Start Program and Day Care Centers. Today's Seminole and Miccosukee adults labor under severe handicaps, principally because so many have never attended school and cannot converse well in English. The following table shows the percentage of adults 18 years and over who have attained the various educational levels.

Attending college or receiving higher education (college graduate: 1 male—1 female)	5%
High School graduates	12%
10 to 12 grades completed	10%
7 to 9 grades completed	11.5%
Less than 4 grades	10%
No formal schooling	51%
Unknown	.5%

Public Utilities

The utilities available to the Seminoles vary from reservation to reservation. The Hollywood Reservation has city water supply in its entire housing area and a recent sewage lift station was installed. Houses are gradually being connected to the city sewage system from the present septic tank drainfield system. Brighton Reservation has had the problem of foul-smelling and foul-tasting well water until a recent installation by the United States Public Health Service of a water treatment and sewage system to service the 20 new homes obtained through the Mutual Self-Help Program. This water and sewage system has not yet been extended to the area in which the Brighton Clinic and Head Start buildings are located. No facilities are now available to the "chickee" camps.

Big Cypress Reservation had a modern sewage and water system installed a few years ago for a small housing area but most of the people are living in "chickee" or other poverty-type camps. The water table is so high there is little saturation or percolation possible and only special "high-rise" privies are feasible, but there are few of these. Through the efforts of the Bureau of Indian Affairs wells and septic tanks have been installed for 25 new "modified" homes at Forty-Mile Bend on the Tamiami Trail. Two camps have privies installed by the United States Public Health Service. Telephone service, while very unreliable because of distance and overload on the circuits due to the tremendous expansion of South Florida, is available at each reservation area. The present clinics each have a phone, as has the Service Unit Office. Radio communication is sometimes possible to certain locations between Hollywood, Brighton and Big Cypress, where the Bureau of Indian Affairs has installed radio towers and equipment. Electricity is available to some areas at all locations; however, no power has been extended into remote areas at Forty-Mile Bend, Brighton, and Big Cypress. Gas (bottled) for heating and cooking when needed can be purchased in towns but distance again is a deterrent to its use.



Fig. 2.—The Kitchen

Transportation

Indians living in the Miccosukee Reservation, about 40 miles west of Miami on the Tamiami Trail, have an elementary school of the first four grades. Children beyond the fourth grade, currently 18 in number, must be taken to Miami daily and returned. Similarly, except for our clinic, these Indians see doctors in Miami and are hospitalized there if such is needed. The Head Start Program for the Miccosukee Reservation has 20 children enrolled.

Residents of the Big Cypress Reservation drive 40 miles to Clewiston for medical and hospital care other than that provided in the clinic. Again, an elementary school of the first through the fourth grades is immediately available and children from the fifth grade up are bussed to Clewiston. The Brighton Reservation is also serviced by the physicians and hospitals of Clewiston. This too means a drive of 45 miles one way. A few of the residents consult a physician at Okeechobee. All of the children are bussed to schools in Moore Haven, a distance of 31 miles. Indians living at Hollywood have only a ten mile drive to doctors and hospitals and the children attend the local elementary and high schools.

Housing

The homes at the Big Cypress and Brighton Reservations are generally family camps composed of two or more families with sleeping, cooking, and storage chickees. A chickee is of cypress pole construction with platforms two feet or more off

the ground and roofed with palm thatching but open on all four sides. Camps are usually without utilities except for a sand point well with pitcher pump. Camps are often located on high ground (hammocks) in swampy, snake-infested areas. There is a lack of sanitation and protection from cold. However, while there is still a great housing shortage, an effort is continually being made to alleviate this situation.

Forty-Mile Bend now has 25 new "modified" homes and ten family camps. However, there are believed to be approximately 460 Indians living in the overall area in Dade and Collier Counties. At Brighton there are four frame homes which are badly in need of repairs and improvement, five mobile homes, and four modern CBS homes built in 1963. Five frame homes are now being built by the Bureau of Indian Affairs under the Home Improvement Program, one of which will be used as a housekeeping "demonstration" by the Extension Service, 20 new homes have been completed under the Mutual Self-Help Program since March, 1969. Since about 50 families live at Brighton, many are still in chickee camps. Twelve modern CBS homes were built at Big Cypress in 1960. Now under construction by the Bureau of Indian Affairs are 16 camps (of which eight are double with two buildings and a privy each). Two other such single camps have been previously built. These were all under the Home Improvement Program. There are more than 50 families on this reservation, and those not in the homes and camps mentioned, are living in chickee camps. Eighteen modern CBS homes are located on the reservation at Hollywood along with 15 remodeled frame homes. The Bureau of Indian Affairs is building four Home Improvement Program houses and has built three small 4-unit rental apartment buildings. In addition, there are eight mobile homes, one quonset prefab home, and one prefab home. Twenty-two prefab homes are now under construction under the Turnkey III Program. It is believed that when completed these will pretty well take care of present housing needs on this reservation.

Health Problems

Due to insufficient health education and poor hygienic living conditions, a number of diseases are more common among the Seminoles than among the whites. There is also a higher incidence of illness among the Indians living under more primitive conditions when compared to those living on the Hollywood Reservation. Upper respiratory



Fig. 3.—The Old Way

infections are one of the most common medical problems we confront, especially in those of school age. There has not been one single active case of tuberculosis in the last two years, whereas tuberculosis used to be one of the real killing diseases in the Indian population. Possibly because of their "life in the sun," the Seminole and Miccosukee have not been overburdened with this dread disease compared with the Indian population in the other parts of the country.

Intestinal parasites are very common as a result of poor hygiene and indiscriminate use of contaminated drinking water, including that of the canals. Trichuriasis, ascariasis and enterobiasis are the most widespread. Hookworm infestation, cutaneous larva migrans and in some cases the typical hookworm disease, with occult blood in the stools, and severe hypochromic microcytic anemia are found. Deficiency in growth and in



Fig. 4.—The New Way

normal development is very common. The hookworm infestation is due to their ancient custom of going barefooted. In contrast with the Japanese who take their shoes off when entering the house, the Indian will walk several miles barefoot and put on his shoes when he reaches the meeting place. Nits (pediculosis capitis) are common but pediculosis pubis is not seen. Scabies is also absent among the Seminoles.

Most cases of gastroenteritis are due to contamination of the food, environmental conditions and poor hygiene. There are a few cases of shigellosis. During the summer months, impetigo is one of the most common diseases among the children. This is also due to lack of hygiene.

In the adult group, especially in women, obesity is very common. This is largely due to the high fat diet and habit of sitting and sewing in their chickees as part of their way of making a living. I have seen several young girls who weighed over 200 pounds. Because of obesity, not only in women but also in men, the incidence of diabetes mellitus is somewhat higher among the Indians as compared with the whites. As mentioned, most of the cases seem due to obesity but we also have several cases of hereditarily predisposed patients. At this moment we do not have any cases of juvenile diabetes. Alcoholism is one problem confronting us which we are doing the utmost to correct. This occurs not only in the males but also in women. However, portal cirrhosis is not seen. The type of arthritis more commonly found is osteoarthritis, but I have found a few cases of rheumatoid arthritis and rheumatic fever. The incidence of neurosis and psychosis are similar to that of the white population, especially among the women. We have knowledge of one attempted suicide.

We have not had a single case of carcinoma of the breast in the last ten years. We found a few cases of carcinoma of the cervix and uterus in our screening program. As far as I can remember, we had one case of a malignant tumor of the lower intestinal tract during the past two years. We have not seen skin cancers, prostate cancers, cancers of the head or neck, or the lymphomas. As part of our preventive medicine program we regularly conduct screening for carcinoma of the cervix, diabetes mellitus, and glaucoma.

The diet among the Miccosukee Forty-Mile Bend people is principally fish, little or no milk, and little or no butter. They eat heavily of fat, starches, corn, grits, rice, and potatoes, but very little meat; in other words, a diet poor in proteins and rich in fats and carbohydrates. The Big Cypress and Brighton people include more proteins in their diet as they raise cattle and hunt deer and turkey. At Hollywood all types of food are readily available in markets and salaries permit the purchase of more variety. We have not encountered pellagra or scurvy but have seen children with deformities strongly suggestive of rickets although laboratory studies have not verified this diagnosis.

We have an active immunization program for diphtheria, pertussis, tetanus and poliomyelitis. Last year when diphtheria appeared in South Florida, the word reached the Indians in their homes and chickees via the ubiquitous television sets and those who had avoided the immunization shots streamed into the clinics. Thus it is believed that essentially all of the Indians are currently immunized.

Today there is no significant problem between the Indian people and the white doctor. Because the Miccosukee and Cow Creek are not written languages, communication with the patients is sometimes very difficult, even with the help of an Indian interpreter. However, for the last ten years, more and more has been done toward a better relationship and communication between the Indians and the white doctor. The day of the Indian medicine man is fast disappearing. The people are getting more accustomed to the ways of white medicine and even the few medicine men left, come to see the white doctor when they are sick. The Indian midwife has not been used for some years and most of the women bear their children in the hospitals where we have contracts. We are trying very diligently to encourage the prenatals to avail themselves of our clinics as soon as pregnancy is suspected. This will take some time for many of them still come to see the doctor only when they start in labor.

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Josie Billie, Seminole Doctor, Medicine Man and Baptist Preacher

William M. Straight, M.D.

When I was young, I saw doctors come when my brothers and sisters and mother got sick. Sometimes they were able to cure serious sicknesses. Then I thought maybe the doctor's business is alright. When I was about 15 years old, I went to a doctor and asked him, for instance, about coughing—what kind of a song do you use for coughing?—and he told me. It was just a small song. Another time, I asked him about headaches, because at that time I had headaches almost all the time myself. I asked him what kind of medicine is used, and he gave me the medicine and the songs, small things. Another time, I asked him, what do you do when a baby is too young to talk, to tell you what's wrong with him? He told me, if the baby cries and is thin, give him this medicine. I came back and asked him again, many times, about different songs. For about two years I talked to him this way. If somebody cuts his foot with an axe, how are you going to doctor him?—and he gave me a song for that. I asked him a lot of times. The doctor said, he wants to know something, that's alright, and he gave me different songs, different medicines, and told me about different sicknesses. How to cure fever, he told me that too. He just gave them to me, taught me without pay or anything; it didn't cost me anything. There were several doctors I talked to this way—Tommy Doctor, Old Doctor, there were a lot of doctors around at that time, that I talked to. Then, when I was about 17 or 18 years old, Old Motlow (Motlo, Motloe; hopă:yi:ma:lî:, Wind, Miccosukee, Billy Motlow's father) knew that I wanted to know things. He said, alright, you fast for a while, maybe by yourself, maybe with two or three boys with you, and you'll learn. I said alright, and got three boys and we went out and camped by ourselves, without any women. We built a little shack and stayed there.[1]

Thus began the medical career of Josie Billie, Seminole doctor, medicine man and now Baptist preacher. This "doctor's school" was held in January or perhaps early February of 1904 or 1905.

Four Days of Preparation

Josie and his three fellow students, Tommy Doctor, Billy Motlow and Jack Motlow, all unmarried (married men were not allowed to attend "doctor's school" for marriage "ruin em body") met one morning at Old Motlow's camp. Old Motlow walked with them a half mile or so into the pine woods to a small clearing where they could find privacy and set them to work building the structure that was to house them during the four days of schooling. This structure, a square building just big enough for the four of them to lie in side by side, was built without nails using twisted strands from the roots of the strangler fig to lash to poles together. The pent roof, high side to the east, they thatched with cabbage palm leaves. Three of the four sides were completely closed with cabbage palm leaves lashed to the frame. In the middle of the east wall was a doorway which could be closed by a door of palm leaves woven on a pole frame. East of the shelter they collected a large pile of firewood, prepared a fireplace and dragged a large log between the fireplace and the shelter which was to serve as the school form. By now the sun had long since sunk below the horizon, the chill of the night air penetrated their thinly covered bodies and the dark closed in around them. Old Motlow left the four of them huddled around a small fire and the sound of his footsteps quickly died out in the woods as he went back to his camp. There was no supper that night for fasting was part of the ritual. Tired from the day's labors, they soon let the fire burn down and withdrew into their structure. Hardly had they lay down on the palm leaf floor than they were fast asleep.



Fig. 1.—Josie's Father, Littly Billie
(By permission, The Smithsonian Institution National Anthropological Archives)

Long before the first sunny rays began to dispel the ground fog, awakened by the chill the boys set a fire and fetched water with which to make medicine. These preparations completed they waded into the icy waters of the nearby slough to bathe. One of them caught sight of a half asleep mockingbird which he knocked from the tree with a small rock. Pouncing on it, they cut the still beating heart from its body and each ate a portion of it. This assured them skill in learning healing songs for the mockingbird is widely admired for its ability to learn the songs of other birds.

With the first rays of the sun Old Motlow appeared bringing herbs to prepare medicines for the students. Each of the boys in preparation for this event had fashioned from gumbo-limbo or cypress a bowl seven inches in diameter and two or three inches deep with a handle on each side projecting six or seven inches. Collecting these bowls, Old Motlow prepared the first of the medicines, pasî:, from Button snakeroot *(Eryngium synchaetum)* a bowl at a time. As he finished each bowl he handed it to its owner with the admonition not to drop it and not to taste of it until given the signal. Then Old Motlow picked up some willow *(Salix amphibia)* roots he had brought and scraped fine shavings from them into a large, canoe-shaped wooden bowl about three feet long. To these shavings he added perhaps eight quarts of water and let it steep for a short while. The preparation of these medicines was accompanied by appropriate songs blown through the medicine pipe to impart the proper strength to the medicines.

After the ceremony was completed and the medicines ready, Old Motlow signaled the boys to drink first the pasî: and then the willow medicine. To the one who finished the two drinks first, it is said good luck comes. Hardly had they gotten the last swallow of the willow medicine down than all four began to vomit vigorously. The purpose of this emesis, according to Old Motlow, was to "wash out" the mothers' milk from their stomachs and thus clean their bodies and prepare them to learn, to be honest, and refrain from gossiping. The importance of the doctor's keeping the patient's confidences was a lesson Josie learned well and even today emphasizes as one of the important attributes of a good medicine man.

Following the purification ceremony, the boys sat on the log between the hut and the fire and old Motlow instructed them in the various kinds of sickness and sang the songs for the curing of the various sicknesses. Between songs Old Motlow would remain silent until one of the students asked a question that would start him out on another subject. About noon he instructed the boys to go inside the shelter, lie down on their backs with their arms by their sides, and not to get up until he returned except possibly to answer the call of nature. Under no circumstances were they to



Fig. 2.—Josie (1921) with his wife, Louise Doctor, daughters, Camilla (standing) and Effie and Dr. Howard Kelly, Professor of Obstetrics and Gynecology, Johns Hopkins Medical School.
(By permission, The New York Botanical Garden[6])

leave the shelter. He then fitted the door in place and returned to his camp, leaving them to think over and discuss the lessons of the morning.

The afternoon passed slowly; it was almost painful for the young boys to remain supine and without changing position. Just before sunset, Old Motlow returned, removed the door and instructed the students to bathe, build a fire, and warm up a pot of sofki made without salt from a special variety of corn, "white corn" (aspihátkî:). This prepared they took the bowl into the shelter and sitting down in a circle, passed the bowl from person to person four times around. With each round each student dipped one spoonful (almost a cup full) of the sofki and ate it. These four spoonfuls of sofki each day were the only food allowed during the four days of the "doctor's school." Soon after eating, Old Motlow instructed them to again lie side by side on their backs and to sleep that way all night. His footsteps died away in the direction of his camp and the boys were left to listen to the night noises and talk until one by one they fell asleep.

The morning of the second day found the boys up well before sunrise. Again they brought the water, started the fire, and bathed in the slough. Indeed, they were still splashing in the slough when Josie spied Old Motlow approaching. Whooping with boyish glee they swam to the shore, shook themselves off and ran to the campfire. The first order of business was for each student to tell Old Motlow the dream or dreams he had during the night. The doctor listened attentively but made no effort to interpret the dreams for them; later he discussed each dream with the student privately. He did talk a little about the meaning of dreams in general: a dream of being rained on indicates the student "understands pretty good" and does not "mix it up."[1] A dream of hunting indicates the dreamer wants to learn, i.e., hunt knowledge. A dream of money is an ill-omen and means the dreamer may die of abdominal pains in a couple of years.

The second morning Old Motlow spent telling his four students about the origin and structure of the earth, moon, and stars. As Josie later recalled, he "talk about the earth, sky, star, moon, sun—who made them, how many stars, working just like people, milky way work." Patiently he let the boys interrupt with questions to clarify a point here and there. Then he taught them about the ghost, the two-parted soul within them, and the relation of the loss of soul to disease. He taught them how the doctor must try to woo the errant soul back into the body of the sick Indian. Indeed, in very extreme circumstances the doctor might choose to send his own soul to bring back the wanderer. However, Old Motlow pointed out this was dangerous business for the doctor's soul might be lured away, and not returning, the doctor himself would sicken and die. With the coming of noon, the boys again lay down in the shelter, Old Motlow fitted the door in place and returned to his camp to remain until just before sunset when they again bathed, prepared the sofki, ate their four spoonfuls and retired for the night.

The morning of the third day was overcast but Old Motlow appeared at the appropriate time to find the boys wet and shivering around the small fire. After a discussion of their dreams, he began the third day of instruction. This day was largely devoted to review of the subjects of the two previous days, questions about points which the boys didn't understand too well and the words of "cheering songs." Again noon came, the long afternoon lying motionless on their backs, the evening bath and four spoons of sofki and another night, colder than any yet.

The fourth morning dawned bright and a little warmer. The boys were awake earlier than usual for this was to be the most exciting day of the "doctor's school," the day when Old Motlow would tell them of songs which would bestow personal power on the student and possibly "bad songs" which permitted the possessor to gain magical power over others. The teacher again arrived about sunup and again heard their dreams. He then taught them many things including how to revive a dead man. Having thus passed the morning, he instructed them to again lie down in the shelter for one hour, then leave the hut for the hunt that signaled the end of the formal instruction period. Having done this and carefully seen to it that their medicine bowls were deposited upside down in the shelter, Old Motlow left for his camp.

The hour passed quickly and the boys were up and away with a shout. They traveled some ten miles into the wilderness and were careful not to be seen by anyone. During the early afternoon Josie spotted a large rattlesnake which they each jumped over as Old Motlow had instructed them to do. He had told them they must not walk around it or molest it in any way. Later they caught and released indigo snakes, corn snakes and scarlet king snakes for by catching and releasing snakes the student gained power. By good fortune they saw a buck which one of the boys

felled with his rifle and which they suspended from a pole by tying its feet together with string made from the strangler fig.

Toward evening they pitched camp on the edge of a slough using a tarpaulin stretched between uprights for a shelter. They gathered wood, built a merry fire, skinned the buck and barbecued its meat without adding salt. Abstaining from salt allows one to walk long distances without tiring. Although the venison smelled delicious and they were ravenously hungry after four days of meager portions of sofki and a ten mile hike, they exercised supreme self-control and waited until the meat had cooled, for the eating of only cooled meat bestows power for warfare. With the venison they ate the white corn sofki they had brought with them and for the first time in five nights lay down to sleep on full stomachs. On Old Motlow's instruction they had not brought tobacco with them for the smoking of tobacco by young people "ruins" the body and makes it weak.

Beginning of Practice

They stayed in this secluded camp two more nights and four days during which time they hunted, caught and released snakes, climbed trees and reviewed and discussed the lessons Old Motlow had tried to teach them. Toward noon of the fourth day they struck camp, strung the remaining chunks of meat on a string made of the strangler fig, wrapped this in the deerskin, and set out for a prearranged spot about a half mile from Old Motlow's camp. Old Motlow came out to greet them, and receive the meat they had brought. He talked with them a while then returned to his camp and they retired for the night. Early the next morning they each fired their rifle into the air as a signal to Old Motlow and he came out and prepared another pot of the willow medicine. They each drank from it, vomited, bathed, then followed him into his camp. Once in camp Old Motlow dismissed them to return to their own camp with an invitation to return the following year for another course provided they remained unmarried.



Fig. 3.—Josie Billie, Miccosukee Doctor and Medical Man's Assistant, 1932
(By permission, The Smithsonian Institution National Anthropological Archives)

The following two winters Josie returned to the "doctor's school," the first year with Old Motlow again and the second with Tommy Doctor. Then between the years of 1907 to 1911, he accompanied Tommy Doctor on his rounds assisting him and learning from him. Finally, about 1911 he "hung out his shingle" as a full fledged doctor. Patients were slow in coming and he was consulted only for the relatively minor illnesses. However, between 1917 and 1923 Tommy Doctor died and many of his former patients became patients of Josie so his medical practice began to grow.

Tribal Affairs

Also about this time Josie began to take an interest in the affairs of the tribe and to accept minor responsibilities in the tribal organization. He became one of the two medicine man's helpers (ai-yicks-chee a-da-hus-kee; literally "medicine servant"). At the Green Corn Dance each year he swept the dance ring after the dances, he helped collect the herbs used in the preparation of the ceremonial "Black Drinks," he prepared the first two "Black Drinks," and he rounded up and brought in the laggards and evaders so that they might be scratched on the final morning of the Green Corn Dance.

About 1920, the medicine man, Jimmy Doctor, recognizing his intelligence, maturity, and leadership ability, asked him to become his assistant. In this position Josie was constantly at the beck and call of the leader of the tribe. When problems arose, he was taken into the confidence of Jimmy Doctor and thus learned a great deal about human nature, tribal problems, and practical politics. He and Jimmy Doctor would arrive at the dance grounds two or three days early to

supervise the medicine man's helpers in the preparation of the grounds, the repair of the tchoc-ko thloc-ko, and the gathering of wood for the dance fire in preparation for the annual Green Corn Dance. It was they who decided which dances would be danced, scheduled the sequence of the dances, and made sure the necessary accouterments were at hand. Once the festivities were underway he was busy seeing to innumerable details and carrying out duties assigned by Jimmy Doctor. Sometimes it was he who blew the prayers into the Black Drinks and as he did so he named over each part of the body so that when the Indian rubbed it over the various parts of his body it would prevent disease of each part. During the ceremonies of the Green Corn Dance he was careful to always turn to the left, for "if they turn around like this (turning to the right) maybe make everybody crazy Es-Te-Fas-Ta (Emissary between the Supreme Being and the Indian) watchin' all the time—see'em turn like this (turning to the right), say, 'all right, make everybody crazy' (sweeps his hand)."[2]

Most important of all, it now became his duty to accompany the medicine man at dawn on the fourth day of the Green Corn Dance as he bathed ceremonially, and chanted songs to the Great Being (Fee-sa kee-kee o-meek-chee in Miccosukee; Sa-kee tom-mas-see in Cow Creek), asking personal protection as they handled the powerful medicines in the medicine bundle, and finally, to go into the woods and return with the medicine bundle. Later that day he assisted the medicine man in opening the medicine bundle and examining the items one by one to determine if all were present and in good condition. Finally, on the last night of the Green Corn Dance at twilight he went to the medicine bundle where it hung on the forked stick, addressed it solemnly, lifted it off the stake and brought it back to where the medicine man was sitting near the medicine fire. Again he assisted in the examination of the items in the medicine bundle to see if Es-te-fas-ta had given the tribe any new medicines. Finally, this done, he sat up all night with the medicine man.

About 1930 Josie became a member of the busk council, i.e., one of the headmen who decide the affairs of the tribe and who sit in judgment on the wrongdoers.

Old Billy Motlow died in 1937 and with his death his medicine bundle passed to Josie Billie. From 1937 to 1944 Josie took care of the medicine bundle but he insists he did not "own it." In this capacity he was Chief of the Miccosukee Indians. He served as spokesman for the Miccosukee Indians to the white man, arbitrated interpersonal strife between the Indians, attended the Green Corn Dance at Dania and Brighton, and most important he supervised the annual Green Corn Dance of the Miccosukee tribe.

About 1943 Josie moved from his camp on the Tamiami Trail near Ochopee to the Big Cypress Reservation, and at the same time he became a Baptist convert perhaps through the efforts of an Oklahoma Creek preacher sent by the Southern Baptist Home Missions Board. He returned to the Trail and held the Green Corn Dance in 1944. This was the last Green Corn Dance he held or even attended for the Miccosukee Indians demanded that he surrender his medicine bundle. He gave the bundle to his brother, Ingraham Billie, and returned to the Big Cypress Reservation where most of the Christian Indians reside.

Early Life

The year of Josie's birth is shrouded in uncertainty as there are no written records. Sturtevant states he was born "about 1887, probably somewhere in the Big Cypress area and into the Panther clan."[1] Greenlee, who met Josie in 1939, writing in 1944 states, "Josie Billie is fifty-four,"[3] which would make his birth date 1890. Josie told this author that he was 60 years old when he first attended the Florida Baptist Institute in 1946 which would make his birth date 1886.

His father, Littly (Little) Billie (also known as Little Billie Fewell, Billie Conepatchie, Billy Koniphadjo, Ko-hip-ha-tco, and by his Indian name, koniphă:cî: which means "crazy skunk") was born about 1860 and died in a drunken fight in 1926.

In 1879 when Littly Billie was a boy in his late teens, he went to Ft. Myers to live with the family of Capt. F. A. Hendry. Capt. Hendry, a veteran of the Billy Bowlegs Seminole War (1856-1857) and the Civil War and one of the biggest cattle ranchers in Florida, took an interest in Littly Billie and sent him to school in Ft. Myers. Hendry described Josie's father as, "He learns fast and attends promptly not missing an hour." Josie believes his father was the first Seminole to attend a white man's school.

Although attending white man's school was against Seminole law, Littly Billie went to school in Ft. Myers for three successive years. However, his relatives became increasingly angered at his consorting with the white man and decided upon a plan to waylay and kill him. Informed of this by his brothers, he left school, hid out for a year

and finally turned up at the Green Corn Dance on the east coast the following year. The council there was inclined to have him killed but they were dissuaded by Littly Billie's father's relatives. It remained against Seminole law for many years thereafter for an Indian to attend white man's school.

According to Josie and to various white men who met Littly Billie, he was a highly intelligent man who thirsted for knowledge and was eager to try new ideas even if it meant learning from the white man. Thus, he was one of the first to buy his wife a hand-powered sewing machine (about 1900) and she was among the first to make the brightly colored, striped dress now characteristic of the Seminole.

Josie's paternal uncle, Key West Billy (also known as Billy Fewell), was also an innovator. At one time he lived for a period in Key West, something unheard of for the Seminoles of his day. He also built a two-story frame house to live in, a feat rarely if ever duplicated by a Seminole. Josie describes him as a ladies' man, having had "about seven wives" at various times, "just like a bulldog." Among his wives were two Seminole Negroes, by one of whom he fathered Billy Bowlegs.[1]

Perhaps the strongest influence on Josie was his maternal grandmother, Nancy Osceola. The Ingraham expedition met her during their crossing of the Everglades in 1892 and described her as "bright and talkative." Other early travelers described her as "very talkative for an Indian." She was a young girl during the Seminole wars and often recounted her experiences to Josie. She is his source of information upon obsolete customs of the Seminoles.

Thus Josie has a heritage of intelligence and innovation on both sides of his family. When he was two days old he was given his boyhood name, ayo:posăykî:, which means "go around" in Creek language. At about four months of age his father took him to Ft. Myers where Belle Hendry (? Carrie Belle who married James Evans) gave him the name "Josie" which he says is a woman's name and was the name of another of Capt. Hendry's daughters (? Laura J. who married C. W. Thompson).

As a boy Josie was not permitted to attend white man's school for it was still against Seminole law. However, he became the boyhood chum of Frank Brown, whose father had an Indian trading post near the present Big Cypress Reservation. He spent many hours at Frank's home and one of the ladies of the house undertook to teach him how to read and write English. In spare hours he would slip out into the woods and surreptitiously write on bark or scraps of paper the names of his friends and other words, then take them to this lady for correction. If he chanced upon a scrap of written English, he would take it to her and ask its meaning. His first formal schooling was at age 60 when he attended the Florida Baptist Bible Institute in 1946. Today Josie speaks English in a broken, staccato style but seems to have an ample vocabulary. He reads from the English Bible quite well and also prefers it to a translation of the Bible in Miccosukee which he owns.

Marriage and Formal Education

Josie has been married three times. About 1916 he married an Otter woman, ayohei: (Louise Doctor) by whom he had seven children, two of whom died in infancy. (Camilla, John Poole, Effie, Frances, Joe Billie and two deceased infants) Only Effie and Frances are alive today but he has 25 living grandchildren. Josie says he was talked into this marriage by an important member of the tribe but that he never really loved his first wife. After perhaps ten years of marriage he took her back to her people and left her. This action was later sanctioned by the tribal council and this constituted divorce. Soon thereafter he married "an old widow (Lucy Tiger, Sonny Tiger's widow) with whom he lived two or three years. She was apparently addicted to whiskey and in a drunken fit stabbed him in the neck (he displayed a one inch scar just below the tip of the left mastoid). He says, "If she come this way," indicating an encirclement of the anterior neck, "I be dead." He decided not to remain for another dose of this medicine and divorced her. He then married his present wife, also Lucy Tiger but of a different clan (Jimmy Tiger clan, Bear sib). This has been a long and happy marriage. His last two marriages have been childless.

As a boy he lived near Fort Shackleford in the northern part of the present Big Cypress Reservation. As a young man he hunted alligators for their hides and might make as much as $300 in a year that way. Some time after 1928 he established a camp near Ochopee beside the newly opened Tamiami Trail. As a young man he had a liking for liquor, and indeed, during a drunken fight over money in 1928, he stabbed to death a Mrs. Billie Roberts, a member of the Tiger sib. Before the council of the Green Corn Dance the following June he was able to exonerate himself, possibly

because of the fact that she belonged to his own sib who did not press for prosecution, and the prestige attached to his medical and ceremonial knowledge. Josie attributes this success to the supernatural power he has within him that enabled him to overawe his opponents. After his conversion to Christianity he became and remains a teetotaler.

Like his relatives before him, Josie has been an innovator. According to him, he was the first man to wear solid color stripes on his shirts, a forerunner of the present patchwork shirts. He and a friend were the first to cut their hair like the white man. In a photograph taken in 1921 he is dressed in an Army uniform complete with laced up leather boots—an unusual costume for a Seminole at that time. (These were bought in a store at Everglades City; uniform $2.50, boots $12.00, belt $1.00) He was among the first to spend a tourist season in a commercial camp near a city, and also accompanied a group of Seminoles to the Chicago World's Fair in 1933 and the New York World's Fair in 1940.

In 1945 he made his first of many annual trips to Oklahoma. At the reservation there he preached and practiced medicine. Although he will not accept money for "doctoring" here in Florida, he did accept four or five dollars a visit in Oklahoma and used the funds to offset the expenses of the trip. When asked why he did not accept money for medical assistance here he said, God made the herbs he uses and gave them to man without charge, therefore he, Josie, must not charge for their use. Sturtevant got a somewhat different answer. Josie told him that since he was taught the art of medicine without charge, he must not charge for his services. He would accept a gift of pig, turkey, venison, a deerskin, etc., and he might later sell these or possibly sell moccasins made of the skin and pocket the money.

Beginning in 1946 he attended the Florida Baptist Bible Institute at Lakeland (later moved to Graceville and the name changed to Baptist Bible Institute) for three months each year for three years. This constitutes the whole of his formal education. He received his license as a preacher and was the assistant pastor of the Big Cypress church when it opened in 1948. At present he no longer does any "doctoring" but devotes his full time to being a minister.

Present Life

Today Josie and his wife live in a concrete block two room house on the Big Cypress Reservation, have electric lights and an electric refrigerator and cook with bottled gas. Next to it is another concrete block structure, his store; he is quite proud to say "I own this." He sold us Coca-Cola at 17 cents a bottle, reminding us to leave the bottles. On the shelves of his store were various snack foods and canned foods. A neatly lettered sign on the front of his store reads "Cowachobee, Okalee, Miccosukee." (Josie translates this, "Panther Home, Miccosukee"). Alongside the store is a chickee, on the floor of which was a bedroll, suggesting that he or perhaps his guests at times slept there.

Sturtevant found Josie much more willing to talk to the white man than any of the other Seminoles, and the only Seminole he had ever seen who would address a clerk in a store whom he did not know. Indeed, Josie's attitude about many things is much more progressive than that of any of the Seminoles except possibly the younger generation who have accepted many of the white man's ways. For example, Josie told Sturtevant that the "non-Christian conservative leaders say that wrong-doers should be executed, following the old custom, but that he tells them that the old ways are gone, that now if two men fight, it is their own affair and no one else's business. The



Fig. 4.—Josie Billie, Baptist Minister, 1967
(Printed by permission of The Miami Herald)

conservatives are mostly against white schooling, but Josie says the world is changing fast now, and the old ways and the old 'law' are no longer valid. He says he knows the old ways, the busk, and so forth, as well as any of the conservatives, but thinks they are no longer good. There are too many white people now for that and there are getting to be more every year. The Indians are no longer alone in the region, and there is nowhere for them to go; they can retreat no farther, because there is 'water all around.' "[1]

Although Josie still respects the value of the curing songs and herbs he has used throughout the years, he also respects white man's medicine. Indeed, back in the 1930's he used to bring Indians by the score to Dr. M. Sewell Pender at Everglades City for treatment with white man's medicine. At this time he was not only a respected Miccosukee doctor but also a medicine man of the Trail Miccosukee. Dr. Pender particularly recalls the 1934 malaria epidemic (Plasmodium vivax) introduced by south Georgia Negroes who came to work in the sawmills. Within two or three months there were three or four hundred cases. Josie would either bring the Indians to his office—he recalls seeing them sitting under the trees outside his hospital in the rigors of the chills awaiting their turn—or he would get the medicine, Atabrine, and take it to them in their camps. Later Indians would appear at his office with an empty atabrine bottle that some member of their group had given them and simply say, "You gottem, me want um." Recently when asked who his doctor was, Josie quickly replied "white doctor" and took us inside his house where he opened a medicine cabinet and displayed several proprietary remedies and prescription bottles.

Sturtevant points out that Josie remains very conservative in many areas. Thus he is strongly opposed to Indian-white marriages, particularly the marriage of a white man to an Indian maid. This latter is particularly hazardous as the Seminoles are organized for matrilineal descent. According to Sturtevant, the non-Christian Seminoles do not like Josie because of his progressive ideas and his identification with white man; many hate him and some even fear him. Some have claimed that he killed a man by sorcery back in the 1940's but Josie disclaims this, pointing out that it is common for the enemies of the medicine man to circulate such charges. Josie did tell Greenlee[3,4] in 1939 that he knew several malevolent magical techniques. In talking with Sturtevant, Josie said, "That's a little dangerous for doctor's business (i.e., it's dangerous to be a doctor)—you talk a little too much some people don't like it . . . Doctors some of them hampĭ:kî: ('bad'), some of them want to know pontĭ:kî: ('sorcery'). Some only want to know pontĭ:kî:. If I no make 'em well for people I got that kind (i.e., if I fail to cure people, I am suspected of being a sorcerer)."[1]

Josie Billie is highly intelligent and an intellectual at heart. Sturtevant recorded the names of more than 225 different plants which Josie recognized, identified, described their growth habits, flowers, fruits, and uses. He also knows hundreds of curing songs, dance songs, ceremonial procedures, etc. He has an interest in genealogy and history, and is a capable farmer, woodsman and hunter. Sturtevant found Josie "slightly deaf" in 1953 but today he is almost stone deaf, making communication difficult.

Though a controversial figure among his people, Josie can look back on a long and useful life. He has served his people well as a doctor, member of the council, medicine man and now Christian minister. Throughout the years he has been an innovator who early recognized that the Seminole could not continue to live in isolation. He has attempted to bring to his people the best of the white man's way of life while retaining the best of the Indian's culture. Anthropologists are deeply indebted to Josie for because of his knowledge, willingness to talk, and ability to communicate in English he has been the single most important source of Seminole tribal lore. Indeed, as the young Seminoles acquire more education, they may well become grateful to Josie and the few like him who have helped preserve their heritage.

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The Chinese Diagnostic Doll

William M. Straight, M.D.

"In the great bedchamber Madame Ch'u lay in state in a marvelously carved wooden bed hung with heavy curtains. Gorgeous red embroideries formed a canopy above the curtains. I wondered how in the world I could ever examine a patient within such an enclosure.

"The maids . . . started to describe their mistress' ailments . . . Presently Madame Ch'u spoke in a somewhat husky voice, supplementing what the maids had said. After I had made a few further inquiries, I was surprised to see the curtains part slightly and the patient's hand come through. In her hand she held a little ivory figure of a reclining woman, completely undressed. 'It is not considered seemly,' she said, 'for a Chinese lady of rank to be examined by a man doctor, so I am handing you this ivory figure marked in two places, the chest and the abdomen, to show you exactly where the pain is located.' "[1]

This scene occurred in Changsha, Hunan province, about 1906 or 1907. A Danish surgeon, Erick Rosen, apparently encountered similar use of the "Doctor's Lady" or "Doctor's Doll" as late as 1946.[2] The beginning of this custom is uncertain but perhaps it started as early as the 17th century. Attempts to date the dolls have met with little success as they were utilitarian items rather than works of art and were never signed or dated by the makers. The only existent doll that can be definitely dated is one in the National Museum Ethnographic Collection in Denmark.[3] This doll is known to have been brought from China in 1732 but it is not known how old the doll was when it arrived. According to Dittrick[4] when the doll is carved reclining with the head propped on one flexed arm it probably belongs to the Ming Period (1368-1644) (Fig. 1). He also states that dolls made before 1910 often show the feet deformed and bound with constricting bandages.

The use of the "Doctor's Lady" was widespread throughout China but apparently never in Japan. Although most of them were made of ivory, a "warm" material, other materials such as rosewood, jade, amber, alabaster, soapstone, and "Dragon's Teeth" (dentine of prehistoric animals caught in crevasses)[4] were used. The dolls were often owned by the lady of rank and might even be marked with charcoal and sent by a servant to the doctor, thus avoiding a trip to his consulting room or a house call by the doctor. They were also at times carried by the doctor and passed through the closed canopy for the lady to mark or to hold and point out the location of her trouble with her finger.

Usually the lady is portrayed completely nude except for a foot covering. Occasionally as in the seated doll (Fig. 2) a robe or cloth partially drapes the figure. Occasionally a decorated fan covers the genitalia (Fig. 3). The fan usually is so placed that the genitalia are not completely covered, permitting that area to be used for demonstration if need be. The feet are commonly tiny and the footwear ranges from binding thongs, to scuffs, to delicate slippers, to elaborate boots extending above the ankles. It is said[5] that the Chinese lady's modesty necessitated keeping the feet covered even when in bed with her husband. To allow a stranger to see her feet bare was a disgrace for her husband and to allow them to be touched brought catastrophe. Perhaps this explains the common finding of footwear on the "Doctor's Lady."

The figure is most commonly portrayed reclining on one side or the other with one arm under the head or propping it. The other arm and hand may hold or cover one breast, may cover the mons veneris, may hold a fan covering the



Figure 1



Figure 2

genitalia, or hold a somewhat stylized flower which has been identified[2] as a peony. Occasionally leaves are portrayed on the stem of the flower. The seated figure with its Ming dog chaperone is the only seated "Doctor's Lady" known to the author. Aagard[3] shows one in the standing position. The couch on which the doll reclines may be carved from the same piece as the doll figure or it may be constructed of wood and display designs such as the ancient lock and key design noted in Figure 4.



Figure 4



Figure 3

Characteristically the hair is brushed back from the forehead and coiled into a bun on one side or upon the top or back of the head. It is commonly lacquered black though in some of the more ancient dolls and some of the recent reproductions it is unpainted.[4] Occasionally flowers appear in the hair. Commonly delicate ear pendants of simple design hang from the ear lobes.

The interest of antique collectors of the western world in these figurines has spawned the production of reproductions, particularly in the city of Hong Kong. Several years ago in the theater district of New York City in the window of an importer's shop the author saw a "Doctor's Lady." The ivory appeared too white to be old ivory. At that point he noted on a shelf in the rear of the store four identical dolls indicating that these were probably made as "export items" to be sold to the unwary as "genuine antique Doctor's Dolls." Often these "export items" have occidental facial features, occidental coiffures, and normal sized uncovered feet. There may be decorations about the nipples of the breasts. Thus Figures 3 and 5



Figure 5

are probably "export items." Indeed, the ultimate of the ridiculous was recently displayed at an antique show: a doll with oriental facial features, an occidental coiffure, and large uncovered feet.

These pretty little figurines served a useful purpose in a culture in which it was improper for the lady to disrobe in front of the doctor or allow him to touch anything but her wrist. History should record them as one of the early diagnostic aids.

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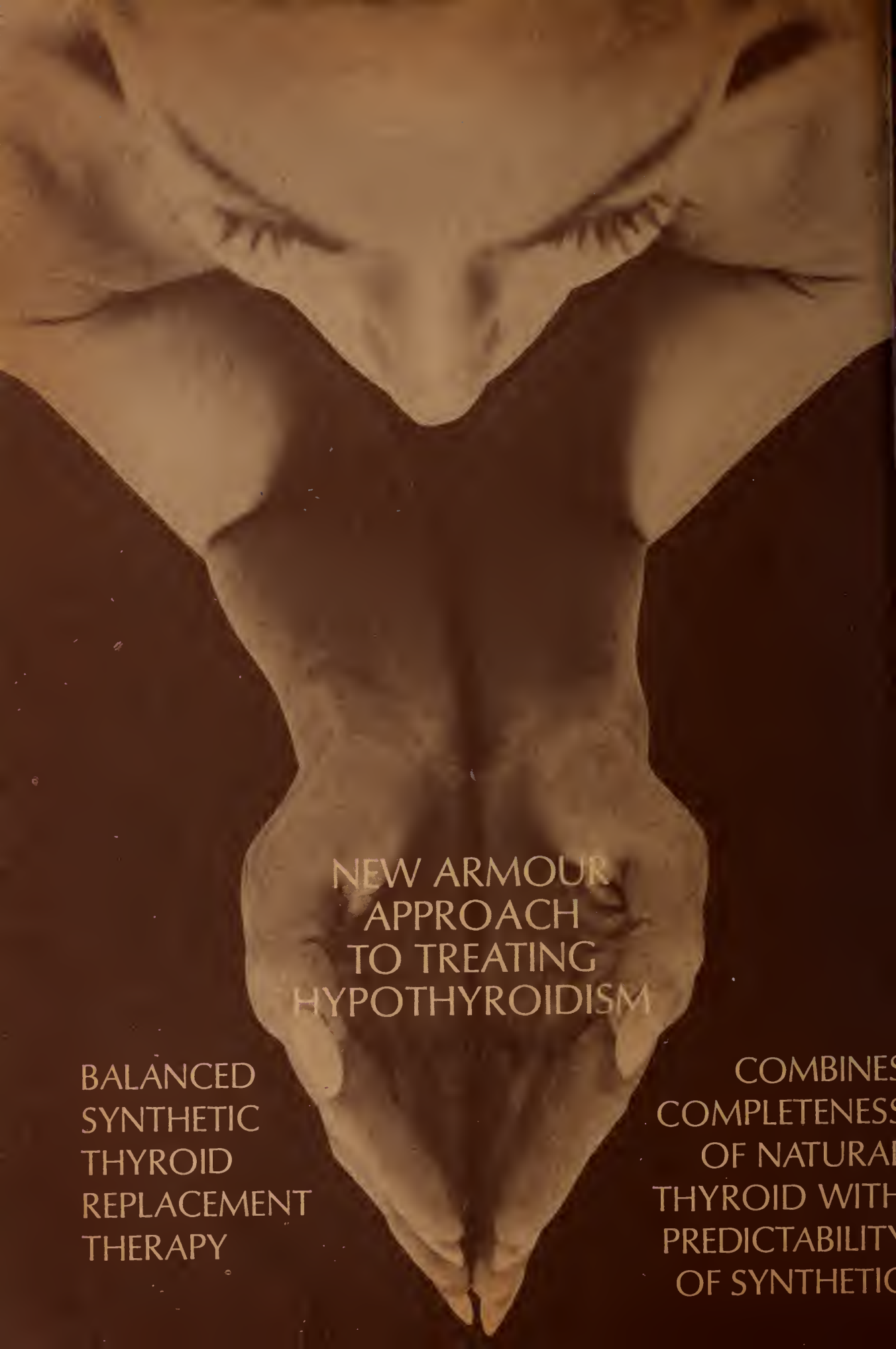
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PRECAUTIONS: Patients with hypothyroidism and especially myxedema are particularly sensitive to thyroid preparations so that treatment should begin with small doses and increments should be gradual. In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents. Conversely, decreasing the dose of thyroid hormone may possibly cause hypoglycemic reactions if the dosage of insulin or oral agents is not adjusted.

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Woman's Auxiliary



Forty Seventh Annual AMA Auxiliary Convention

Following the theme "Up, Up, and Away," the 47th Annual Convention of the Woman's Auxiliary to the American Medical Association opened at the Drake Hotel in Chicago. The meeting was presided over by the president, Mrs. John M. Chenault of Decatur, Alabama. Reverend John Miller of Chicago gave the invocation. Pledges of allegiance to our flag and the auxiliary were led by national past presidents Mrs. Asher Yaguda and Mrs. William G. Thuss. Greetings were brought to the House of Delegates by Dr. William E. Adams, president of the Chicago Medical Society and Mrs. William West, president of the Illinois Medical Auxiliary.

The Keynote Address was given by Mrs. Louise Bushnell, Director, Women's Activities, National Association of Manufacturers. She urged that these three ideas be remembered: (1) excellence should be the criteria for hiring, not color, creed or what have you, (2) we should not slur any job in any field—take out the "snob appeal" in some jobs and professions, and (3) that the average American woman does not need to be liberated by any group of her sisters. She concluded by hoping that all auxiliary members become involved in their local politics, for this is the only way we can hope to preserve our American way of life.

The Elections Committee chaired by Mrs. Lee E. Rice of Colorado was presented to the House. The current Florida Medical Auxiliary president served as a member of this committee. Following nominations for the 1971 Nominating Committee a Memorial Service was conducted by Mrs. John Schneider.

The meeting recessed for the "Heavenly 70's" luncheon held in the Gold Coast Room. Dr. Gerald Dorman, president of the AMA, spoke on "What Is So Rare As This Day In June." Dr. Dormon's speech was followed by presentation of the Auxiliary's contribution to AMA-ERF. The grand total was over $498,000—just shy of a half million dollars. Florida's contribution this year was $16,636.05. Dr. C. Long, president of AMA-ERF, accepted the contribution and then presented awards to winning counties and states.

The afternoon session resumed at 2:15 p.m. and two minute oral reports were given by the Southern and North Central regions. Florida's "Idea Exchange" was given by the president, Mrs. Arnold J. Spanjers.

Tuesday, June 23rd, the delegates were back in their places. State presentations resumed and we heard from the Eastern and Western regions. Safety awards were presented and reports given by AMPAC and AMA-ERF. The House of Delegates was urged to "really get involved" in this crucial election year.

Wednesday morning we were back in the Ballroom for the report of the Elections Committee, another vote to fill a Board vacancy, and various presentations. Following the report of the 1970-71 Nominating Committee, elections were held. The installation was conducted by Mrs. George Turner. Mrs. R. C. L. Robertson (Marjorie) of Houston, Texas was elected president and Mrs. G. Prentiss Lee (Patty) of Portland, Oregon was elected president-elect. With the presentation of the gavel, yellow roses from Texas, the Doctor's Rose from Oregon, tears, kind words, *et al* poured forth in great profusion. It was a sweet, sentimental time and a time for adjournment of this 47th Convention.

The FMA auxiliary president and president-elect, Mrs. Wesley S. Nock, stayed on for the postconvention Conference of State Presidents and Presidents-elect.

It was the FMA Auxiliary president's privilege to hear the name of Dr. Jere Annis of Florida be placed in nomination as president-elect of the American Medical Association. Unfortunately, he was defeated but Florida can be proud of him. He and his lovely wife, Margaret, have won the esteem of many medical societies across our nation.

It was a great convention and another instance that brings my gratitude to the 3,000 members of the Florida Medical Auxiliary for making me their president. It was a privilege and an honor to have been the presidential delegate. Thank you.

Bennie Spanjers (Mrs. Arnold J.)
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Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia,* exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

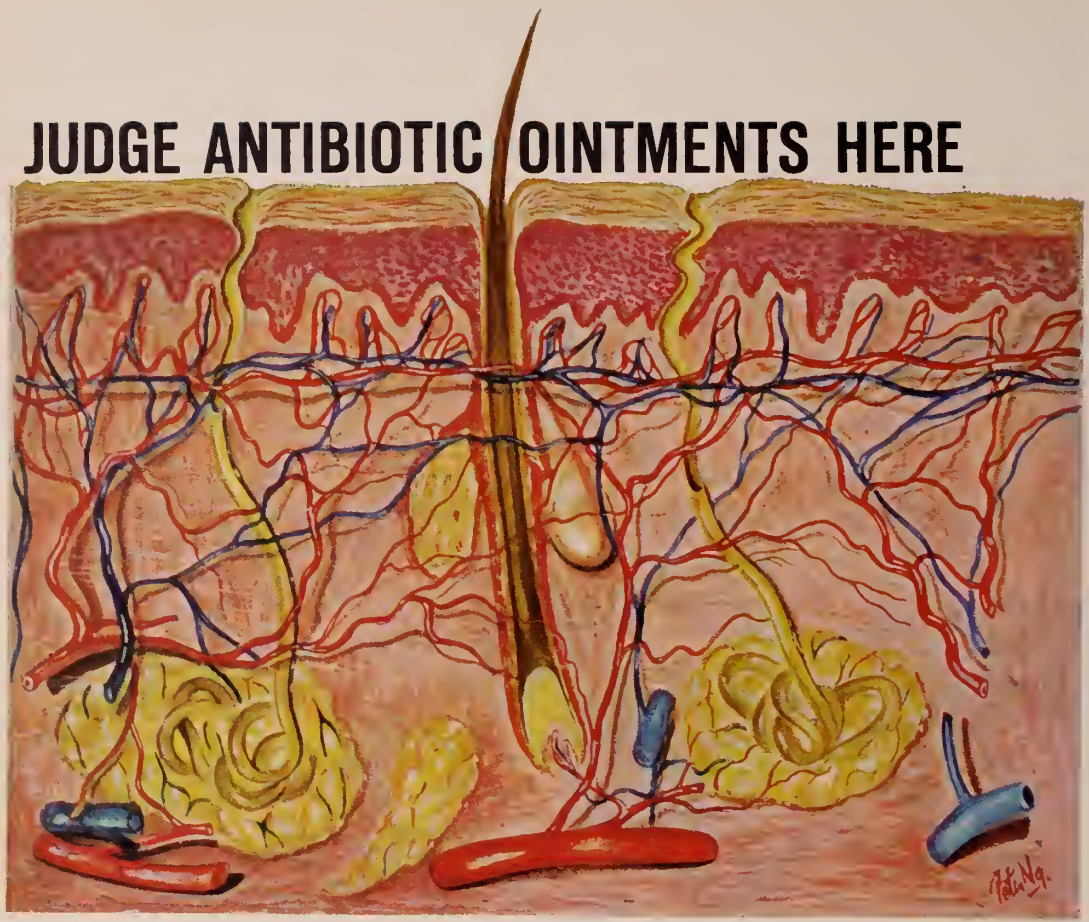
Dosage Forms: Oral tablets . . . 250 mg.
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Editorial



History is not made by one man alone but rather is the story of many people, each following his own consciously desired end; the saga of many wills operating in different directions, the chronicle of their manifold effects upon the outer world and it upon them. History is but a collection of the crimes, follies and misfortunes befalling mankind interposed with noble deeds wherein each person in his own way is trying to find happiness. Spurred by his needs, his passions, his character and talents, every man in some measure is intent on finding a purpose or meaning to his life.

As individuals grow older and mature, they become more or less interested in history, the former realizing that he who does not study history is forced to repeat the mistakes of the past. With this publication of the Journal, for the third consecutive year, we are indebted to Dr. William M. Straight for editing a special issue devoted to medical history. In putting together the papers for this issue, Bill says that his sources are running dry but there must be available more medical history in Florida and he hopes that this third compilation will stimulate interest in our readers to explore and write of the history of medicine in their community.

My local society was blessed with the late Dr. Webster Merritt, who wrote several history books of medicine including one entitled "A Century of Medicine," an account of the practice of the healing arts in Duval County. There are many gaps in this history and recent attempts to unearth events have been unsuccessful. Soon after the society was organized in 1853 the war between the states broke out and the 6 doctors practicing medicine in Jacksonville closed their offices; four joining the confederate army, one working as a civilian in a military hospital at Lake City, and one joining the union forces. After the war, as far as we can learn, these 6 doctors returned to Jacksonville, re-opened their offices and reorganized the society, electing Dr. A. S. Baldwin as president in late fall of 1865. From that time until 1874 when the Florida Medical Association was founded with Dr. Baldwin as its first president, little is known about the pioneer medical society, for our records were burned in a fire in 1901. When the Florida Medical Association was organized, Dr. Baldwin was the first president and the third president was Dr. Francis P. Wellford who also practiced in Jacksonville. Webster tells the story about him, when in September of 1877, an epidemic of yellow fever developed in Fernandina and quarantine was established. After two weeks, the epidemic became so severe that local health officers sent a request to Jacksonville for aid. In answer to their call, Dr. Wellford volunteered his services. After working in Fernandina one week, making over 50 house calls each day, Dr. Wellford went to bed with a fever and died eight days later. On October 12, 1877, the Duval County Medical Society, at a called meeting, passed the following resolution:

"His courtly gentleness and modesty of manner, his kindly yet high-toned ethics in all his professional relationships, his unselfishness in everything that related to friendship or duty alike, ever marked him as one endowed with all of these attributes of head and heart which unite to make the accomplished physician and christian gentleman. Resolved that as a mark of our esteem, his name be kept permanently on our roll and called at every meeting."

At the annual meeting of the Florida Medical Association the following year, the president's chair was draped in black to pay tribute to Dr. Wellford's memory and a committee was appointed to raise a scholarship to perpetuate his name. The proceedings of the next year fail to mention any report from this committee and no record of a scholarship fund has been found. Last year, the retiring president of the Duval County Medical Society, as his final official act proposed that as an approbation to the courage, devotion and compassion of Dr. Wellford and as an inspiration to the members, the resolution of October 1877 be again made a part of the order of business. As it no longer is customary to call the roll, at the beginning of each meeting Dr. Wellford's name is flashed on the wall by a projection used to notify members that their answering service is looking for them.

C.M.C.

Blue Cross and Blue Shield

James L. Borland Jr., M.D.

During the controversy concerning the Blues at FMA's Annual Meeting in May, it was apparent that much confusion still exists regarding some Blue Shield policies. The FMA Committee of 17 felt that an editorial was needed to discuss some recurrent problems raised by Florida physicians.

I. Clear definitions are needed for adequate communication between physicians and Blue Cross-Blue Shield. Doctors often use "Blue Cross-Blue Shield" as synonymous terms when discussing *physicians'* fee problems. Blue Shield is "the doctor plan," only involved with physicians' fees, and the program established by the FMA House of Delegates. Blue Cross is not established by FMA, not under direct physicians' control and, of most importance has nothing to do with physicians' fees. Discussion of problems relative to physicians' fees should *not* include Blue Cross.

"Usual and customary" also causes confusion. "Usual" refers to the *individual* physician's profile based upon fees charged by him alone. "Customary" concerns the spectrum of charges submitted by physicians in the entire community. For payment purposes, charges which fall within certain percentiles of these figures are considered "customary" for the community.

As with Blue Cross and Blue Shield, pragmatism is needed in discussions of problems concerning physicians' fees. Choose Blue Cross or Blue Shield and "usual" or "customary" as needed but do not lump them as single entities.

II. The Social Security Administration office in Baltimore has issued a blanket policy that community *customary* levels must not be allowed to rise above figures established as of July 1969. There is *no such written directive* concerning the individual physician's *usual* fee. Stringent criteria have been offered for judging the propriety of a rise in a physician's usual fee, but no blanket prohibition. Most controversies concerning an individual physician's fees arise from the interpretation of Social Security Administration criteria by the Blue Shield administrative staff. Using its interpretation, the staff has elected to deny individual fee increases. This understandably results in irritation and conflict between Blue Shield and the physician, which could be obviated if the staff would interpret the guidelines *literally*. Simply by granting reasonable requests for fee increases, then notifying the Social Security Administration and letting the Atlanta office decide whether or not to refuse the increase; the physician could correctly identify the SSA and Medicare rather than Blue Shield as the agencies restricting allowable physicians' fees.

III. The disagreements concerning the use of relative value scales versus usual and customary levels for determining allowable benefits of insurance policies seem on the surface to make little sense. One major point against using a relative value scale is that the government can then peg the physician at a fixed fee scale. The SSA has clearly demonstrated that it can fix a payment scale no matter what mechanism is used for determination. The customary levels for Medicare are now frozen at the July 1968 level. Even if the percentiles used to calculate usual and customary payments are known, the actual figures allowable are not. Would not restriction at a known level (relative value scale) be preferable to a secret level (usual and customary)?

IV. Finally, loss of the Medicare contract would not destroy Blue Shield as it has no long range property or employee commitments based upon government contracts. *This requires strong emphasis!* Blue Shield has fought valiantly for the physicians' interests and has only acquiesced to SSA demands when threatened with loss of the Medicare contract. (In maintaining this contract, Blue Shield is following the dictates of FMA).

Before doctors in Florida, by unalterable opposition to SSA directives, force Blue Shield to relinquish the Medicare Part B contract, we should reflect on the possible consequences to physicians and patients should the contract be awarded to a profit-minded, private insurance company with no physician representation and guidance. In considering this point, the following paraphrase of a Shakespearian quote may be appropriate: "It is better to bear those ills we have, than to fly to those we know not of."

Dr. Borland, 2706-8 St. Johns Avenue, Jacksonville 32205.

Let's Work as Fairly as we Can

Floyd K. Hurt, M.D.

Dr. Borland's editorial concerning Blue Cross and Blue Shield is the result of a discussion in the FMA Committee of 17 who are justifiably concerned about the confusion and misunderstanding that exists between Blue Shield and the physicians of Florida.

As has been emphasized many times, Blue Shield of Florida has undertaken to act as the physical administrator of the Medicare program at the request of organized medicine of Florida, mainly the House of Delegates. It is under their direction that the Blue Shield board has consented and is willing to act as agent for the entire state.

In doing this, they have of necessity been required to put in force the directives which are handed down from the Social Security Administration office in Washington. If misunderstanding arises, it is not particularly surprising in view of the often vague terms used by the Social Security Administration in implementing its policies for reimbursement of physicians for patient care.

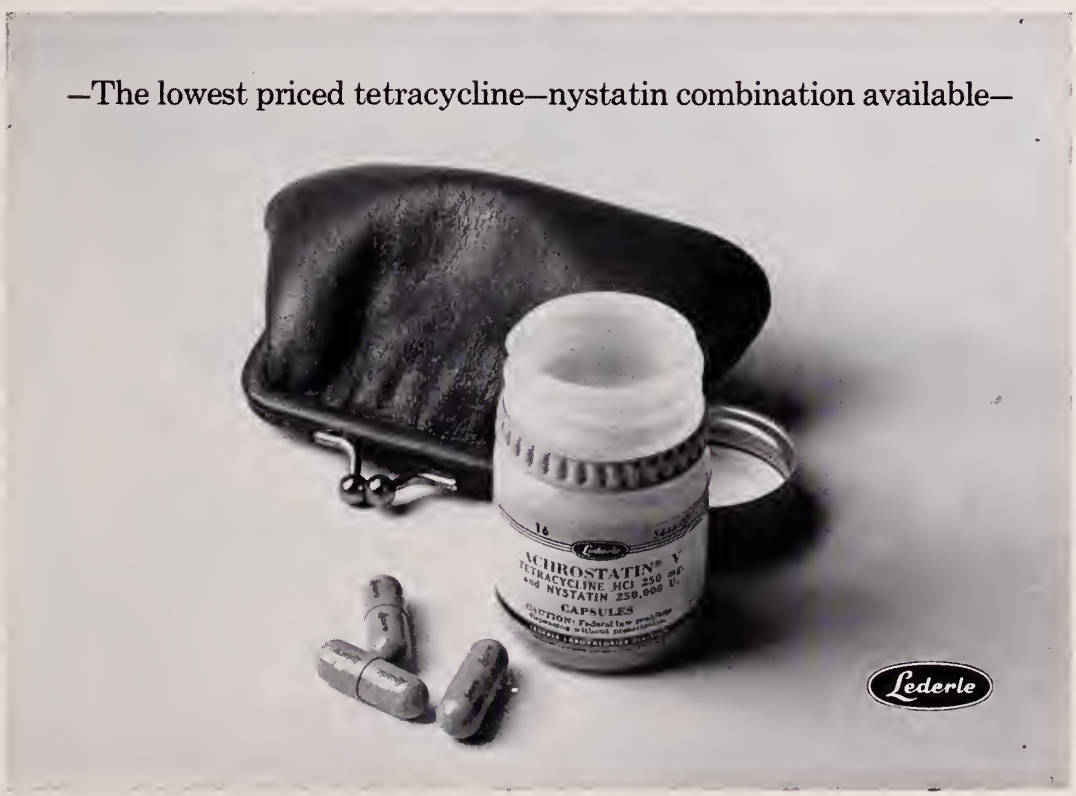
As has been pointed out in Dr. Borland's editorial, the policies of this administration are under continued revisement and change. This further adds to the problems of Blue Shield in attempting to administer the program fairly. It is my own personal feeling that considering the staggering job which Blue Shield has in administering the Medicare program, it is not surprising if misunderstandings and confusions arise. I think, however, that the physicians of Florida are fortunate in that we have a physical administrator, who, although not without faults, is still perfectly agreeable to doing everything in their power to correct mistakes.

Those of us who have followed closely the entrance of the federal government into medical care of the aged realize the problems that are inherent in this system. It is typical of third party intervention in the care of sick people.

Our only alternative now is to work with our chosen administrator, Blue Shield, to make the program of the Social Security Administration work as fairly as we can.

Dr. Hurt, 460 St. James Building, Jacksonville 32202.

Dr. Hurt is President-Elect, Florida Medical Association.





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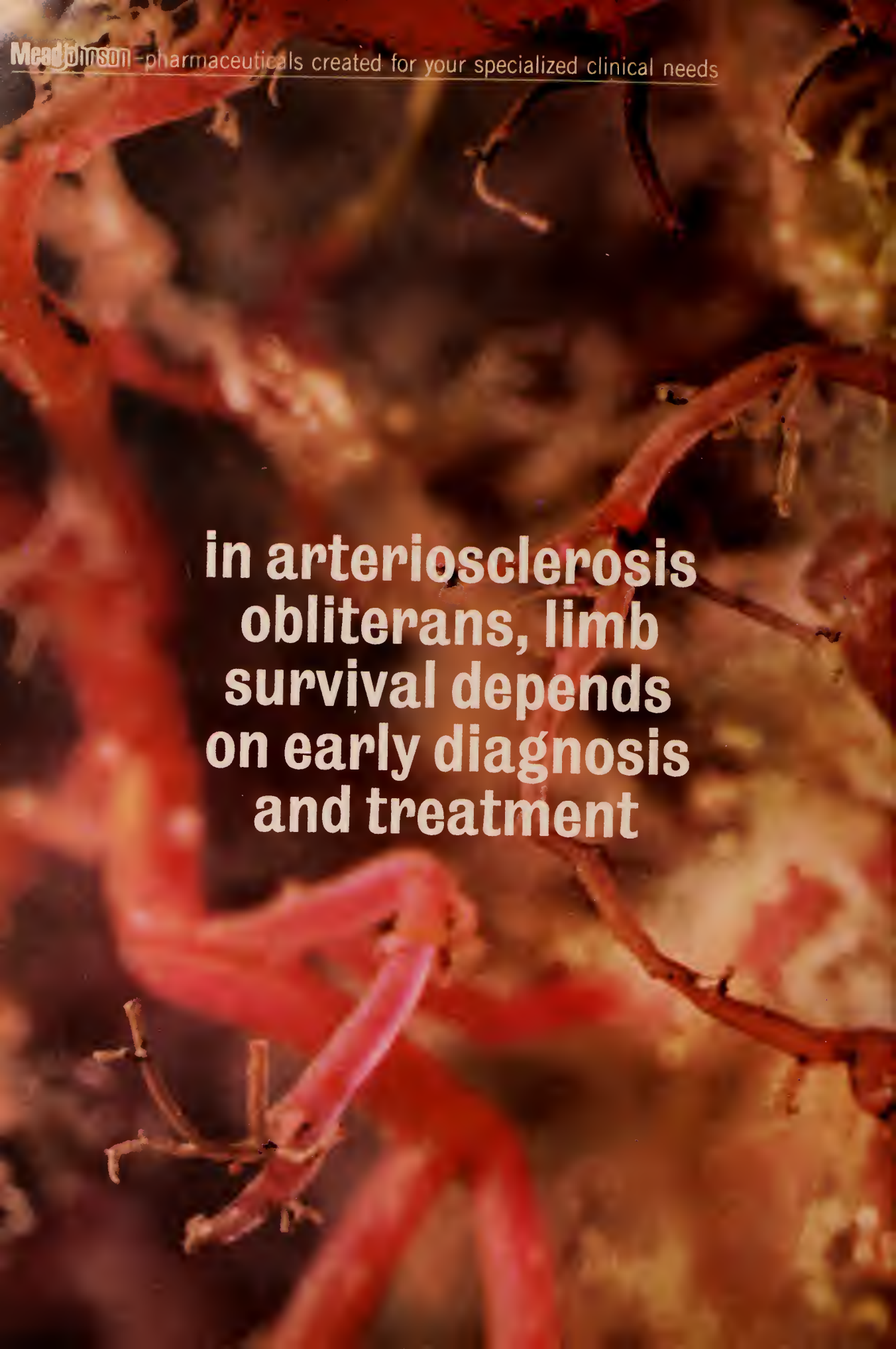
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Microphoto of small artery occlusions in a toe amputated because of severe arteriosclerosis obliterans. Cast was made by injecting acrylic plastic into the vessels. The occluded vessels measure about 30 to 50 microns in diameter. *Used with permission. Courtesy of Margaret C. Conrad, Ph.D., Department of Physiology, Bowman-Gray School of Medicine, Wake Forest College, Winston-Salem, N. C.*

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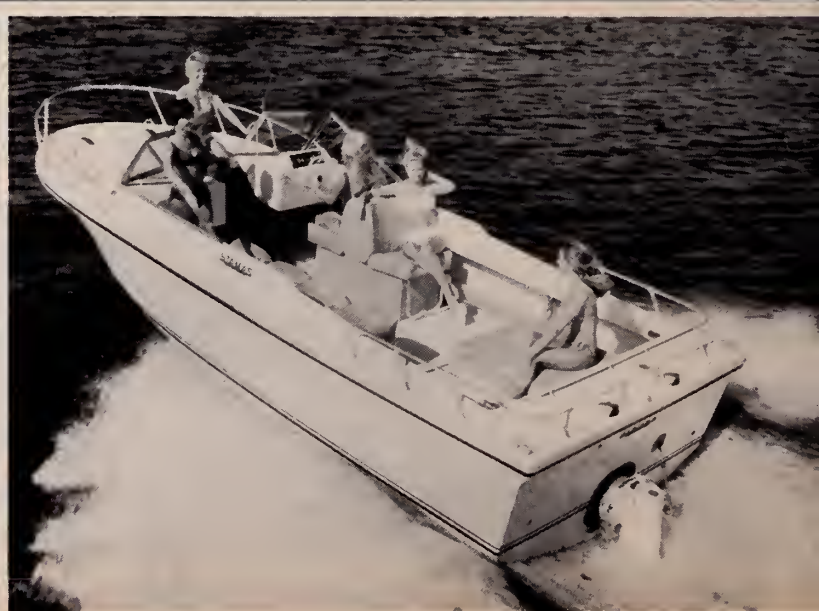
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ORGANIZATION



Sergeant at Arms for the Florida House of Representatives, Mr. Claude Wingate is signing up to be tested for glaucoma, in association with a program to educate the public in the importance of eye examinations. (Left to right) Walter W. Sackett, M.D., Harry Rolfes, M.D. and Mrs. Kitty Minton.



Dr. Francis T. Holland, (left) of Tallahassee, receiving the American Medical Association Certificate of Appreciation from Dr. L. J. Snyder, Chairman of the AMA Council on Rural Health, at the 23rd National Conference on Rural Health, held in Milwaukee, Wisconsin, April 9-10. Dr. Holland, who served as chairman in 1969, has been a council member since 1960.

Early Florida and Organized Medicine

Franz H. Stewart, M.D.
MIAMI

Perhaps readers of *Massachusetts Physician* in New England will feel a sense of seniority, even hoary-headedness, in reading of the beginning on January 14, 1874 of organized medicine in Florida.

Florida joined the United States in 1821, and 40 years later fought in the Civil War. Nine years after Appomattox, the medical society of Duval County invited physicians over the widespread area of Florida to meet to form a State Medical Society. Then Florida, like Hawaii and Alaska today, was an infant state but a land old in adventure, western culture and strife.

Spanish Influence

The Spaniards founded St. Augustine in 1565 including two surgeons among the original group. These Spaniards defeated the French at Ft. Caroline. Bitter contests continued among the English, French and Spanish, but the Spaniards held out for almost two centuries. In age, Florida is more Spanish than English; but in culture, the British influence dominates.

Medicine was closely organized under Spanish rule. The surgeon-physician-apothecary, when present, was paid a salary, his duties outlined and hospital rules set down. He was responsible to the authority in Cuba or to the Crown itself. Here is a quotation from those old rules:

> The physician is required to see his patients twice daily and enforce silence and tranquility among his entourage during the rounds lest one of his subordinates misunderstand an order. . . . When surgical patients also have medical diseases, the physician will visit these on the surgical ward.[1]

We forget these beginnings and start over as Americans and see organized medicine as we started it in our day. The *Journal of the Florida Medical Association* did not begin as such that day in Jacksonville in 1874, but the proceedings of that meeting and the scholarly orations that followed are carefully recorded and available to us. It is recorded thus on February 17, 1875, "Dr. John P. Wall read an interesting and carefully prepared paper on 'Preventive Medicine' which received marked attention. . . . Dr. Wall's paper was referred to the Committee on Publication." Our Florida Medical Journal is a continuation of the activity of this committee, and the editor today is again the chairman of the Committee on Publications.

The proceedings of the first meeting of the State Association were accurately recorded. (See Table 1.) At this first meeting, several additional physicians were elected members and among these was Dr. T. M. Palmer. Dr. Palmer gave an address at the annual meeting in Jacksonville on April 18, 1877.

Birth of Society

This paper, "Medical History of Florida," is printed in the proceedings and discusses so appropriately the medical surroundings at the birth of our society that part of this address is copied here from the official proceedings.

> Coming to Florida only eight years after its cession by Spain to the United States, and when it was but a trackless wilderness inhabited by few except the untamed and untutored savage, and the many wild beasts of the forest and deer of the plains, and birds of beautiful and bright plumage, it is reasonable to suppose that I have seen many strange and startling events occur in this then far off land, almost unknown to civilization and culture. At that early day, your own beautiful city, now so full of life and energy and busy hum of work and business, was but a collection of a few log huts, houses of a few frontiersmen and stockminders; and about this point was what was known as the Cow-ford, where these wild herdsmen crossed the noble St. Johns, without bridge or ferry. This majestic stream was not then teeming with life and the busy traffic of its present prosperous commerce, but was as silent and solitary as the unknown regions of the West.

Vast Wilderness

Indeed, this whole State was an unknown country, except a few miles around Pensacola and the ancient city of St. Augustine. The wild Indian roamed in undisturbed possession over its fertile and verdant hills and dales, from the murmuring Perdido in the west to the grand Welaka in the east, and listened to the wooings of the soft summer breeze, as it came over the unbroken forests of this noted peninsula, or was charmed by shrill voice of the Wastula, (whooping crane) or hunted in the fruitful field of game throughout its length and breadth. In those days of undeveloped diseases and uncleared forests, the whole country was one vast unopened and untraveled wilderness. Nor was any attempt made to settle it until about the year 1825, when a few families settled on the St. Johns, a few more near Tallahassee, and a few more around Pensacola, which was a small fort turned over by the Spaniards to the United States.

Gen. Jackson marched through the country in 1825, and established a post at St. Marks, at Suwannee, Old Town, and Fernandina. And this was the beginning of Florida, which is now attracting so much attention and immigration, on account of its beautiful and healthful climate. Monticello, where I live, was settled in 1827,

Reprinted from the History and Highlights section of the Massachusetts Physician, May 1970.

PROCEEDINGS

OF THE

FLORIDA

MEDICAL ASSOCIATION

JANUARY 14th, 1874.

In response to a call issued by the Duval County Medical Society, in November, 1873, a meeting of delegates from different Medical Societies throughout the State of Florida, and individual members of the medical profession, was held at the office of Dr. A. S. Baldwin, in the city of Jacksonville, on the 14th of January, 1874.

Dr. G. W. Betton was elected temporary Chairman, and Dr. F. P. Wellford appointed temporary Secretary.

A committee, consisting of Drs. R. P. Daniel and R. B. Burroughs, was appointed by the Chairman to examine and report on the credentials, which committee reported as follows:

The Committee on Credentials for the Convention for the purpose of organizing a State Medical Society, respectfully report the following named gentlemen present:

Dr. A. S. Baldwin,
Dr. R. P. Daniel,
Dr. F. P. Wellford, } Duval Co. Med. Society.

Dr. J. Peck . . St. John's Co. Med. Society.

Dr. G. W. Betton,
Dr. R. B. Burroughs, } Leon Co. Med. Society.

Dr. E. G. Clay . . Nassau Co. Med. Society.

Table 1.—This is a reproduction of the record of proceedings at the first organizing meeting of the Florida Medical Association.

and there were but two settlements from that place to Tallahassee, a distance of 30 miles, and only four to Jacksonville, a distance of 150 miles. But a country like this could not long remain unsettled and unknown, after once being opened to the enterprising Anglo-Saxon race. . . .

Escape from Epidemics

All new countries are almost necessarily subject to a high grade of fever, brought on by the rapid opening of the land, and exposing its soil to the rays of the sun, when it was before shaded. But in the settlement of this portion of the state, only small farms have been cleared, and where large orange groves have been planted, the timber was not taken off the land only as it was needed, and hence its escape from epidemics of malarial disease. I may say, at this point, that these intermittent and remittent fevers are the only diseases that can be called endemic in this climate, and they are rapidly becoming less so every year; and I think the time is not very far distant when Florida will be considered the most healthy and desirable state in the Union. These are no fanciful notions of an excited imagination, or the opinions of an enthusiast, but the teachings of long years of patient observation and careful study. It is a source of great pleasure to me, as it must be to the older members of this Association, to look back to the early settlement of the state, and trace its onward march to prosperity and healthfulness. There was a time when Florida was considered by those in other states as little better than a vast cemetery, and few ever came to visit it, except from dire necessity, and they came in fear and trembling; but now how changed! A visit to Florida is considered almost as essential as a trip to Europe."[3]

Medicine was closely organized in isolated areas under Spanish rule, and similar spotty organization was developed under American control in the years prior to 1874. County societies and district societies were growing in the various areas where towns had pushed back the forests.

One would be brash indeed to pick a specific date for the beginning of medical organization in Florida. It developed rapidly with the land. The date of birth of the State Association is well documented in the records quoted here. The same is true of the state Journal. Volume I, Number I is dated July 1914, and yet quoted here are the published proceedings of the association as far back as the day the same association was organized in 1874.

Mirror of Physicians

Groups of venturesome physicians joined together for companionship in professional matters and to pool information and improve the health of their home. As the Indians became less warlike, transportation became less hazardous and time consuming. This permitted the organization to develop on a wider basis. Dr. Palmer has described the nature of the land, the intellectual activity of the physicians and the state of knowledge concerning important infectious diseases. It was with this background and on this base that organized medicine in Florida grew and the *Journal of the Florida Medical Association* began as the mirror of the physicians of Florida.

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3. Proceedings of the Florida Medical Association, Apr. 1877.

Franz H. Stewart, M.D., former editor of the Journal of the Florida Medical Association, practices internal medicine and cardiology in Miami. Dr. Stewart earned his medical degree in 1932 from Emory University School of Medicine. He served as the first professor of medicine and chairman pro tem of the department of medicine of Florida's first medical school, the University of Miami School of Medicine. Dr. Stewart is a diplomate of the American Board of Internal Medicine, a member of the American College of Physicians and of the American Federation of Clinical Research.

Dr. Stewart has two sons who are physicians, one an internist and cardiologist and the other a surgeon. Both are active in teaching and study.

▶ Dr. Stewart, 803 Dupont Building, Miami 33131.

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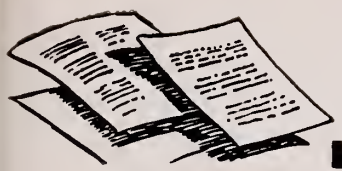
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Letters

Dear Editor:

In the past year 9 white male students have been referred to the Student Health Service with asymptomatic elevations of serum bilirubin discovered because they were volunteer blood donors at the University Hospital. All 9 have had one or more repeated serum bilirubins in the range of 1.5 to 3.5 mgs. per 100 ml. Physical examinations were normal. None of the 9 were drug abusers. Other liver function tests including BSP tests for delayed retention have been normal, as have serum bilirubins on a number of the parents.

Six of the 9 students have lived in Orlando or its immediate suburbs at some time in their lives and 4 of the 9 still have homes there. Since the Orlando area contributes no where near this proportion of male students to the population of the University of Florida, I must conclude that: (a) Having lived in that area stimulates college men to be blood donors, or (b) Having lived there is somehow associated with an elevated serum bilirubin, or (c) This is a chance association.

I reject explanation (a) and doubt (c). The purpose of this letter is to ask if other physicians in the state have observed regional differences in serum bilirubin levels in asymptomatic individuals either in the Orlando area or elsewhere.

W. J. Coggins, M.D., Director
and Associate Professor of Medicine
University of Florida
Gainesville

Dear Editor:

As per your request, I am sending a copy of my end-of-the-tour report as an AMA volunteer physician to Vietnam. This tour was in effect from June to August of 1968. As you well know, the program, AMA Volunteer Physicians for Vietnam, is an effort taken over by our national medical association to help the people of that little, poor, tortured, war-torn South Asian country. The VPVN program is an off-shoot of Project Hope which initiated its first tour of duty in Saigon in 1950. After leaving, as Hope usually does, land-based operations, clinics and teaching facilities in each of the countries it has served, it was felt by the AMA that this should be a project for us to take over and perpetuate as long as it was needed. So, in 1969, one of our St. Petersburg orthopedists helped organize Project Vietnam. This is a people-to-people project coordinated and conducted through its Washington offices. At the present time I believe we have had as many as 10 or more Florida physicians who have done the tour in Vietnam, but I have not received the latest compilation from the VPVN bulletin which we get monthly. Two of your local physicians, Drs. Jose Zubero and Max Suter have done a trick; Jose Zubero having gone in 1967 and Max Suter in 1969.

As you well know from our talk on the plane to Tampa several months ago, I felt that my service was extremely rewarding; one of the highlights of my medical career and I felt that I got as much from the Vietnamese people as they received from me. I would not hesitate to return again for a tour if practice commitments would allow. Some of the men have served a tour every year since its inception and each time feel as rewarded as the first, I'm sure. It has been reported that our project will continue for at least another two years and even if the war is resolved, there will be a need for our services in the distant future. I will be attending a luncheon for the VPVN's in Chicago at the AMA meeting and hope to have some up to the minute news for you.

With best personal regards.

James J. DeVito, M.D.
St. Augustine

Editor's note: Dr. DeVito's report will appear in the September issue of the Journal.

LOVE

I love you,
Not only for what you are,
But for what I am
When I am with you.

I love you,
Not only for what
You have made of yourself,
But for what
You are making of me.

I love you
For the part of me
That you bring out;

I love you
For putting your hand
Into my heaped-up heart
And passing over
All the foolish, weak things
That you can't help
Dimly seeing there,
And for drawing out
Into the light
All the beautiful belongings
That no one else had looked
Quite far enough to find.

I love you because you
Are helping me to make
Of the lumber of my life
Not a tavern
But a temple;
Out of the works
Of my every day
Not a reproach
But a song. . . .

Editor's Note: The author is unknown but we thought this good enough to memorize and recite to the one you love.

Brief Summary of Prescribing Information-9-9/22/69. For complete information consult Official Package Circular.
Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
Contraindications: Anuria, oliguria, active peptic ulceration, ulcerative colitis, severe depression or hypersensitivity to its components contraindicates the use of Salutensin.
Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
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MEETINGS

Approved by FMA Committee on Postgraduate Education

AUGUST

27-29 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Fort Lauderdale. For information: A. F. Caraway, M.D., Div. of Health, P.O. Box 210, Jacksonville 32201.

OCTOBER

9-10 Seminar on Diabetes, Sheraton Hotel, Fort Lauderdale. For information: George P. Heffner, M.D., 4602 N. Federal Highway, Fort Lauderdale 33308.

NOVEMBER

13-14 ENT for the Family Practitioner, Sheraton Four-Ambassadors Hotel, Miami. Contact: Frederic W. Pullen II, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, University of Florida, Gainesville. For Information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

DECEMBER

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings Held in Florida

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn, M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F. Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

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GENERAL SURGEON: Board certified or board qualified for long established multispecialty group. Must have Florida license and completed military obligation. Contact John F. Kerwick, M.D., The Hollywood Clinic, P. O. Box 2308, Hollywood, Fla. 33022. Phone (305) 923-4646.

OBSTETRICIAN - GYNECOLOGIST needed by two associates interested in having a third board qualified physician join them in practice in the Palm Beach county area. Florida license required. Military obligations completed. Contact Mr. Kwart, 9999 N.E. Second Avenue, Miami Shores, Fla. 33138.

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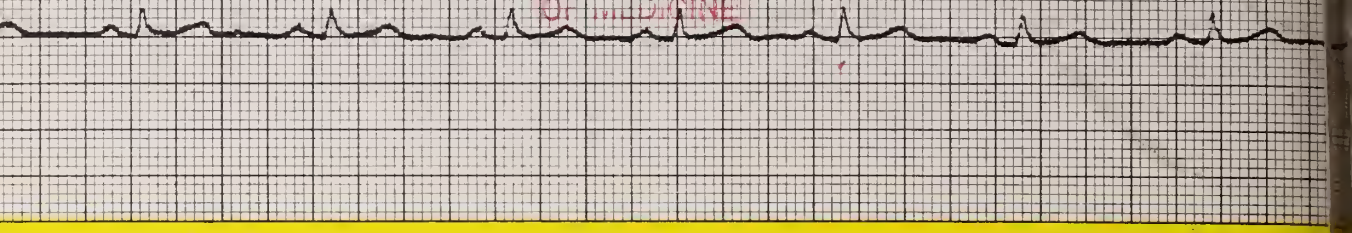
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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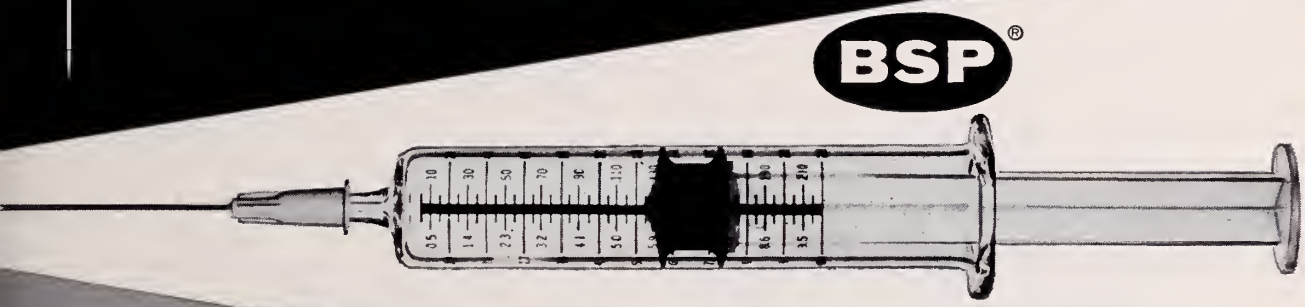
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Effectiveness: Because its antibacterial component is DECLOMYCIN® Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes; a rare case of exfoliative dermatitis has been reported. Photosensitivity; onycholysis and discoloration of the nails (rare). Kidney—rise in BUN, apparently dose-related. Transient, reversible, nephrogenic diabetes insipidus with excessive thirst and polyuria (rare). Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. Teeth—dental staining (yellow-brown) in children of mothers given this drug during the latter half of pregnancy, and in children given the drug during the neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Demethylchlortetracycline may form a stable calcium complex in any bone-forming tissue with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: One tablet b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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THE JOURNAL OF THE Florida Medical Association

SEPTEMBER, 1970 • VOLUME 57 • NUMBER 9

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SEPTEMBER COVER—Our thanks to Dr. Lawrence H. Jacobson of Pompano Beach for sending us this graphic editorial describing the beauty and tranquility of our state.

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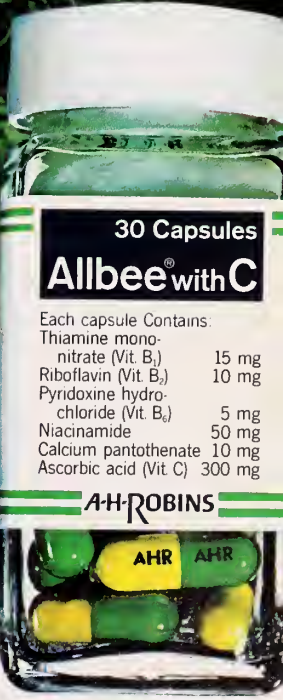
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phenobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
(Warning: may be habit forming)			

Brief Summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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injection

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See Clinical Considerations section on last page...

Injectable Garamycin®

brand of gentamicin sulfate injection

ADULT DOSAGE GUIDELINES

See definitive prescribing information in Package Insert.

Patients with Normal Renal Function

Total Daily Dose (administered in two, three, or four divided doses)			
	Less Severe	Resistant/ Moderately Severe	Serious/Life-Threatening
Urinary Tract Infections (due to susceptible strains of gram-negative bacteria)†	0.8-1.2 mg./kg. for 7-10 days	Larger doses or additional antibacterial therapy should be considered in severe urinary tract infections or in resistant cases involving the renal parenchyma or anatomic anomaly.	up to 5 mg./kg.
Other Infections including bacteremia, infected surgical wounds, severe soft tissue infections, and respiratory tract infections (due to susceptible strains of gram-negative bacteria)	3 mg./kg. for 7-10 days		

†Alkalinization of the urine may be a useful therapeutic adjunct.

Patients with Impaired Renal Function

To minimize the risk of ototoxicity in patients with impaired kidney function, only the first dose should be that normally recommended. Each subsequent dose should be half or less of that recommended for patients with normal renal function, depending upon the degree of renal impairment.

In patients with renal failure who are undergoing 14-hour hemodialysis twice weekly, administration of 1 mg./kg. GARAMYCIN Injectable at the end of each dialysis period has been suggested.

Clinical Considerations

Indications: GARAMYCIN Injectable is clinically effective in infections due to susceptible strains of gram-negative bacteria, including *Pseudomonas aeruginosa,* and species of indole-positive and indole-negative *Proteus, Escherichia coli,* and *Klebsiella-Aerobacter.* Bacteriologic studies should be conducted to identify the causative organism and to determine its sensitivity to gentamicin sulfate. Sensitivity discs of the drug are available for this purpose. If the susceptibility tests indicate that the causative organism is resistant to gentamicin sulfate, other appropriate antibiotic therapy should be instituted.

IN VITRO INHIBITION OF CLINICALLY IMPORTANT BACTERIA BY GENTAMICIN SULFATE (TUBE DILUTION STUDIES)

BACTERIA	No. of Strains Tested	No. of Strains (%) Inhibited by: 4 mcg./cc. or less		8 mcg./cc. or less*		No. of *In Vitro* Studies
Staphylococcus aureus	1,210	1,200	(99%)	1,206	(99%)	11
Pseudomonas aeruginosa	885	771	(87%)	828	(93%)	16
Escherichia coli	836	736	(88%)	779	(93%)	11
Indole-positive and indole-negative *Proteus* species	477	210	(44%)	358	(75%)	12
Klebsiella-Aerobacter species	292	205	(70%)	231	(79%)	10

*Number of strains (%) of gram-negative bacteria inhibited by 10 mcg./cc. or less are as follows: *Pseudomonas aeruginosa,* 828 (93%); *Escherichia coli,* 792 (95%); *Proteus* species, 393 (82%); *Klebsiella-Aerobacter* species, 284 (97%). From same studies as above.
Source: Package Insert

This drug should be limited to the treatment of serious infections caused by gram-negative bacteria, particularly *Pseudomonas aeruginosa, Proteus* and other susceptible organisms, with due regard for relative antibiotic toxicity. Therefore, the drug should be considered for use against gram-negative: 1. Bacteremia; 2. Infected surgical wounds; 3. Severe soft tissue infections, including burns complicated by sepsis; 4. Respiratory tract infections; and 5. Selected cases of urinary tract infection.

Contraindications: GARAMYCIN Injectable is contraindicated in dividuals with a history of hypersensitivity or toxic reactions gentamicin.

Warnings: Patients receiving treatment with GARAMYCIN should be under close clinical observation because of the toxicity associated with the use of this drug. Ototoxicity, vestibular and auditory, can occur in patients, primarily those with pre-existing renal damage, treated with GARAMYCIN Injectable, usually for longer periods or with higher doses than recommended.

GARAMYCIN Injectable is potentially nephrotoxic, and this should be kept in mind when it is used in patients with pre-existing renal impairment. Kidney function diminished by infection of the upper urinary tract may, however, improve during effective treatment with GARAMYCIN Injectable.

Concurrent administration of potentially ototoxic drugs such as streptomycin and kanamycin or of potentially nephrotoxic drugs such as polymyxin, colistin, and kanamycin with gentamicin sulfate has not been shown to afford any clinical advantages and, moreover may result in additive toxicity. Monitoring of vestibular, cochlear, and renal function will provide guidance for therapy in such cases.

Precautions: In patients with impaired renal function in whc serious infection develops, serum concentrations of the drug m rise, with consequently increased risk of ototoxicity. In these p tients or in those in whom recommended dosage or duration therapy must be exceeded as a life-saving measure, routine stud of kidney function should be performed when possible. These m be supplemented by evaluation of the vestibular and auditory fu tion and measurement of serum concentration of the drug wh feasible. Serum concentrations of gentamicin should be maintain below the range of 10-12 mcg./ml. to reduce risk of ototoxicity.

Ordinarily, treatment should not be given for more than 7 to days or be repeated unless required for serious infection not sponsive to other agents.

As with other antibiotics, treatment with GARAMYCIN Injectal may occasionally result in overgrowth of nonsensitive organisms. superinfection occurs, appropriate therapy is indicated.

Safety for use in pregnancy or the potential for fetal ototoxicity nephrotoxicity have not been established. Studies in pregnant a mals have not revealed teratogenic or ototoxic effects in the fet GARAMYCIN Injectable should not be used in pregnant patients in women of childbearing age unless its use is deemed advisat by the physician.

Adverse Reactions: The overall incidence of ototoxicity consider related to treatment with GARAMYCIN Injectable was 2.8 per ce (16 of 565 patients). Contributory factors (two or more factors we relevant to most patients) were as follows: 10 had azotemia, received a total of 1 gram or more of the drug, 7 had recently ceived other potentially ototoxic antibiotics (streptomycin or kan mycin), and 5 were over 60 years of age. Six also had decreas high-tone hearing acuity, which returned to or toward normal the 4 patients retested.

Analysis of BUN data indicated that 4 (2%) of 172 patients show increases in BUN that were probably related to treatment wi GARAMYCIN Injectable. Of 20 increases probably or possibly relat to treatment, 7 were reversible, 9 occurred in terminal patients, a 4 had no follow-up.

Other adverse reactions associated with treatment were one instan each of urticaria, decreased hematocrit, and reversible depressi of granulocytes with normal bone marrow. Other rarely report and possibly treatment-related adverse reactions were anemia, i creased reticulocyte count, rash, purpura, drug fever, hypotensic convulsions, twitching, salivation, nausea, vomiting, increased tra aminase activity (SGOT or SGPT), increased serum bilirubin, c creased serum calcium, and joint pain.

Packaging: GARAMYCIN Injectable, 40 mg./cc., 2-cc. multiple-dc vials, for intramuscular administration.

For more complete prescribing details, consult package insert Physicians' Desk Reference. Schering literature is also availab from your Schering Representative or Medical Services Departme Schering Corporation, Union, New Jersey 07083.

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President's Page



Join Now

I am urging every practicing physician who is not now a member to join the AMA. In a short page such as this I cannot give all my reasons but I will give a few.

First, if we in Florida wish our delegates to have power, we need all the delegates we can get; right now, if all members of FMA were AMA members we would have one, and soon two more delegates. On January 1, the requirements will be one delegate per 1,250 members of AMA; now it is one per 1,000 and we can hold any we have January 1.

Second, because you are doctors, and the AMA is the recognized voice of the doctors in governmental and other circles. You may rightly say: "The AMA doesn't speak for me, for I disagree in many decisions." Of course you're right. No organization can always speak for all its members, for they disagree. The AMA House of Delegates can only arrive at a consensus, and that of its members. Nonmembers have no influence. Not only do you have a voice in electing your delegates; any member may be heard before the reference committees. I am not a delegate, but have spoken both for and against resolutions at the AMA.

We expect a lot from our Florida delegates. They give a lot. At the last meeting they all worked a regular 16 hour day. Four of the five resolutions they supported at your direction were passed; the fifth was favorably referred to committee. Long and arduous preparation was evident; they had all done their homework. For this kind of work by some of the best men in the state, we can at least give our token support and respect.

One final point: don't let the news media and governmental liberals gull you into believing the AMA is an ineffectual, do-nothing, reactionary, nonprogressive, monolithic monster. This is simply not true. Of course it has made mistakes. Of course it has lost the Medicare fight—a liberal Congress believed the Wilbur Cohens more than it did the AMA. But now the AMA is respected even more, for time has proven it—or we—were right about costs, and HEW was wrong. I believe that from now on our voice will be better heard. Particularly if the AMA can say that it speaks for all the doctors.

If you are not a member, join before the year is out.

James T. Cook, Jr., M.D.

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Precautions: Exercise caution in moderate to severe he disease. Elderly or debilitated patients may react marked excitement or depression.
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Warning: May be habit forming.
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Worning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cordiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reoctions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastraintestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

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INDICATIONS: SYNTHROID (sodium levothyroxine) INJECTION is specific replacement theropy for diminished or absent thyroid function resulting from primary or secondory atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. It is indicated in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. When o potient does not respond to oral therapy, SNYTHROID (sodium levothyroxine) INJECTION moy be odministered intravenously.

PRECAUTIONS: As with other thyroid preparations, overdose may cause diarrhea or cramps, nervousness, tremors, tochycardia, insomnio and continued weight loss. These effects may become opparent in from 4 doys to three weeks. Therefore, patients should be kept under close observation. Medication, in such cases, should be stopped for 2 to 6 days, then resumed at a lower level. In patients with diabetes mellitus, look for possible changes in metabolic activity which may affect insulin or other ontidiobetic drug dosage requirements.

CONTRAINDICATIONS: Thyrotoxicosis, ocute myocardial inforction.

SIDE EFFECTS: Side effects are secondary to increased rates of body metabolism: sweating, heart polpitotions with or without pain, leg cramps, weight loss, diarrhea, vomiting ond nervousness. Myxedemotous potients with heart diseose hove died from abrupt increases in dosage of thyroid drugs. In most cases, a reduction in dosoge followed by o more gradual odjustment upward will indicate the patient's dosage requirements without the oppearance of side effects.

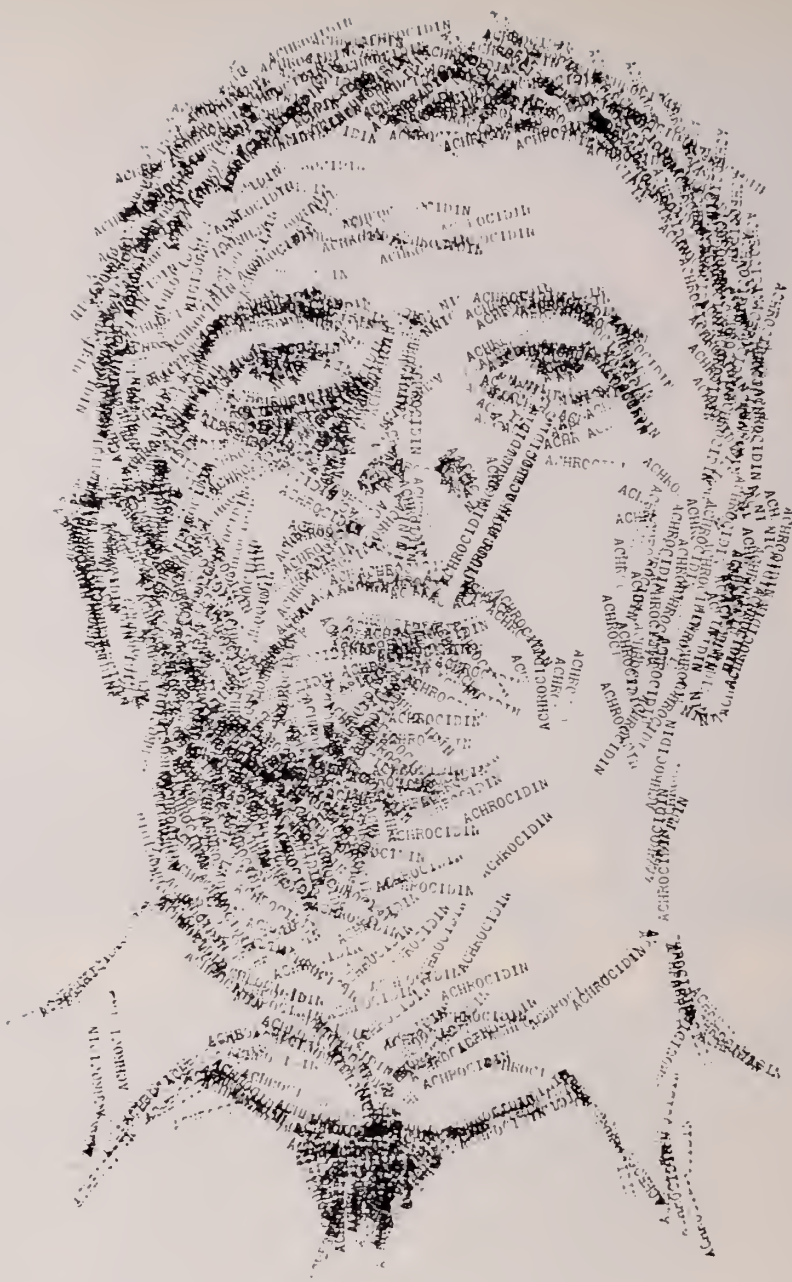
DOSAGE AND ADMINISTRATION: In myxedemotous stupor or como, with no evidence of severe heort diseose, 200 to 400 mcg. of SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing o solution containing 100 mcg. per ml. Detectoble effects ore usually observed by the sixth hour after injection ond ore fully oppreciated during the following day. A repeat injection of 100 to 200 mcg. may be given on the second day if significant improvement has not occurred. The intravenous use of sodium levothyroxine in myxedemotous coma is advantogeous becouse it produces o predictoble increose in the concentration of protein-bound iodine, eliminates the need for multiple doses until oral therapy is reinstoted, circumvents the uncertainty of orol absorption, and ovoids the risk of pulmonory aspiration.

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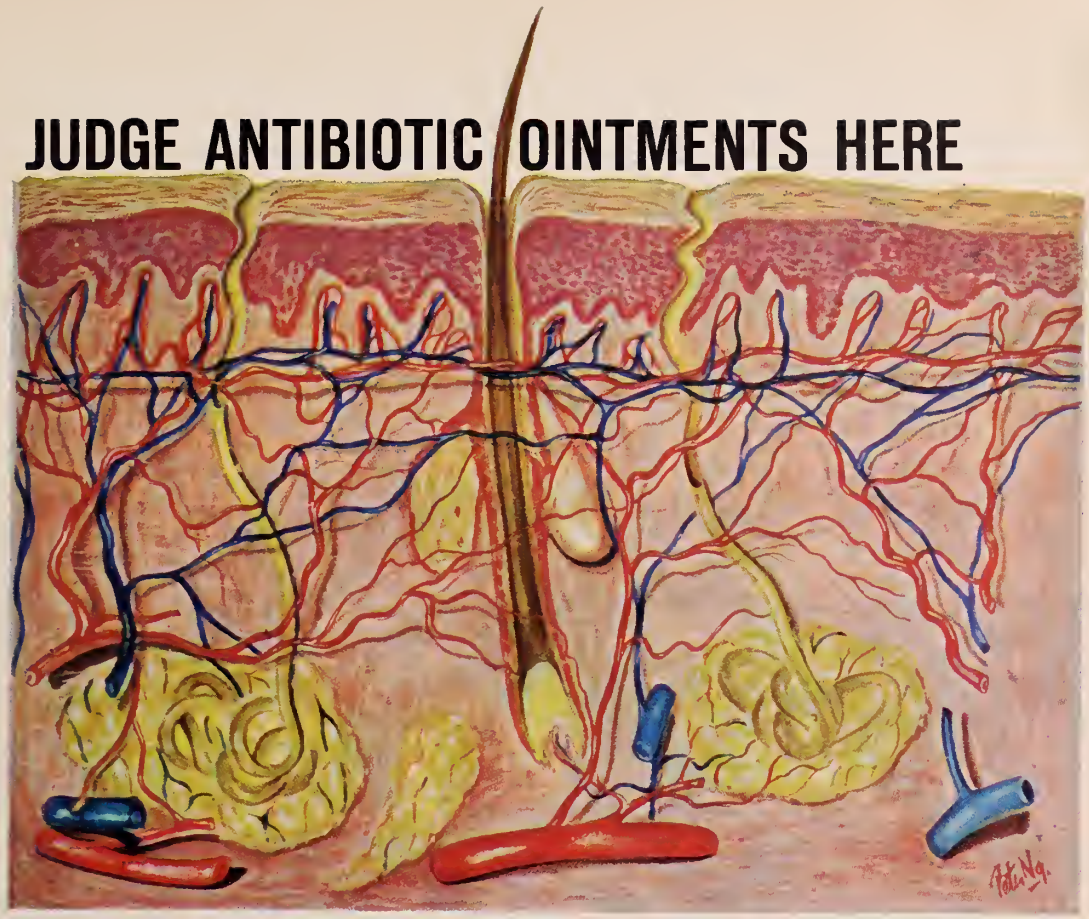
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NOTE: *The high therapeutic index of Trocinate permits its administration in dosage sufficient to relieve smooth muscle spasm promptly. 400 mg. dosage usually creates a therapeutic blood level. In reducing dosage after relief, lengthening the time between dosage rather than lessening the recommended dose is preferable. The prompt direct action allows a consciousness of the first suggestion of return of symptom . . . a guide to dose spacing and to determining when treatment is complete. A prescription for twelve or sixteen 400 mg. tablets will usually correct spasm and leave a few tablets for a reserve.*

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Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient, if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated). Doses above 2400 mg./day are not recommended.

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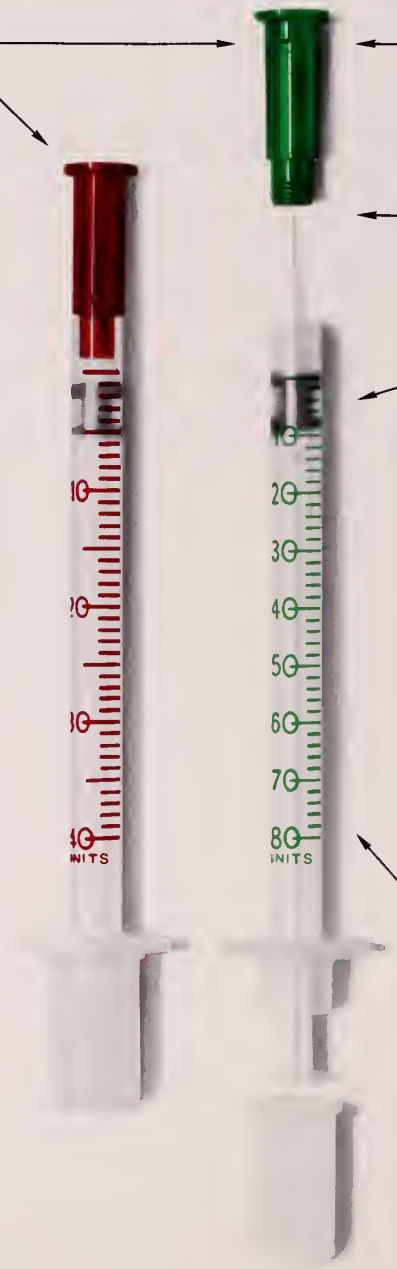
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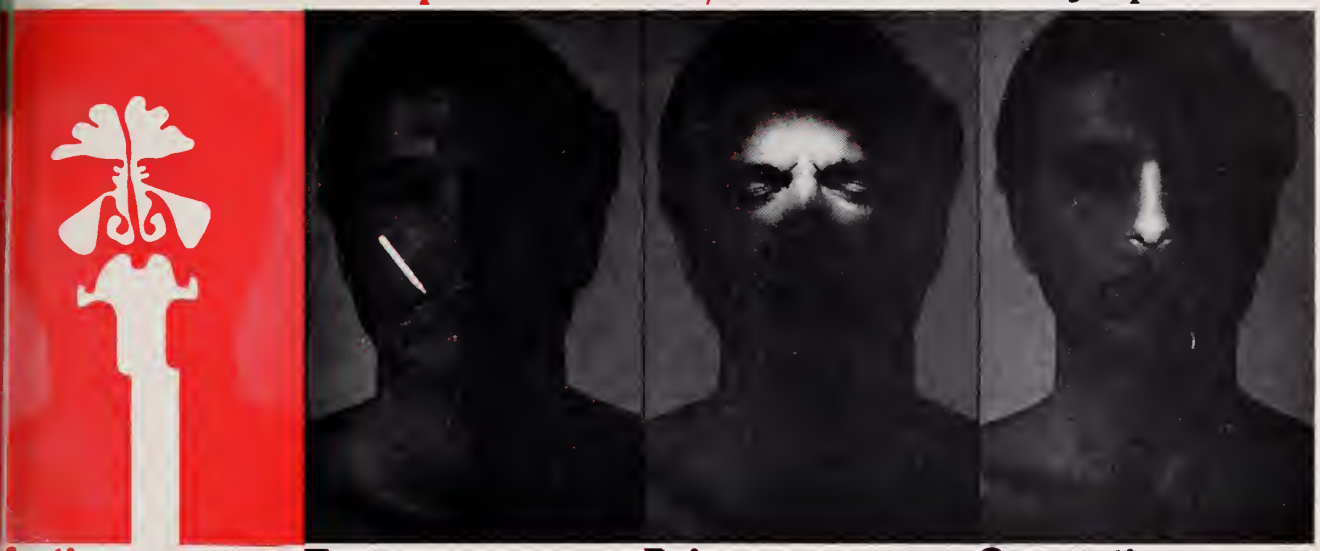
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Precautions: Antihistamines may cause drowsiness and patients should not perform tasks requiring mental alertness while taking this agent. Bacterial or mycotic superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. Cases of gonorrhea with a suspected primary lesion of syphilis should have darkfield examinations before receiving treatment. In all other cases where concomitant syphilis is suspected, monthly serological tests should be performed for a minimum of 4 months.

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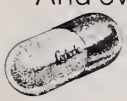
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Scientific Articles

The Neurovascular Island Pedicle Flap in Hand Reconstruction

John Wesley Snow, M.D., Kandiah Sivanantherajah, M.D.,
H. Cecil Johnson, M.D. and Lewis J. Obi, M.D.

In the critical areas of pinch between the thumb and index finger normal sensibility is essential for satisfactory hand function. Therefore, replacement of insensitive or absent skin and soft tissue in these areas must also include restoration of sensibility. This difficult requirement is often best met by using various modifications of the neurovascular island pedicle flap as described by Littler.[1] In this paper, a neurovascular island pedicle flap is a segment of skin and subcutaneous tissue completely separated from its underlying and adjacent structures except for the nerve and blood vessels.

Moderate size skin and soft tissue avulsions over the volar aspect of the thumb or index finger may be replaced by elevation and advancement of a volar skin flap.[2] If the soft tissue defect is too large to close in this manner, a local island pedicle flap of the remaining skin may be elevated as described by O'Brian[3] and as shown in Figures 1a-4a. The joint is then flexed, and the neurovascular flap advanced to cover the distal portion of the digit. The donor site is closed with a full thickness graft. The island pedicle can usually be advanced about 2 cm. This one-staged method works well and results in normal sensibility and stable skin coverage.

When a larger skin avulsion occurs over the volar aspect of the thumb or index as shown in Figures 1b-3b, length can be maintained and normally sensitive coverage reestablished by utilizing a neurovascular island pedicle flap from one of the other fingers. The relatively silent zone on the ulnar side of the distal two phalanges of the ring finger makes a suitable donor area. The skin and subcutaneous tissue is elevated on its neurovascular pedicle and delivered into the palm. The radial proper digital artery to the little finger must



Fig. 1a.—Amputation of half the distal phalanx, nail cul-de-sac and volar fat pad of the thumb of a 45-year-old dentist.



Fig. 2a.—Elevation of local island pedicle of remaining skin over the volar aspect of proximal phalanx.

Dr. Snow is in private practice in Jacksonville and Drs. Sivanantherajah, Johnson and Obi are residents in Plastic Surgery, Duval Medical Center, Jacksonville.



Fig. 3a.—Distal joint flexed and held with transarticular K-wire, island pedicle advanced and sutured over distal phalanx. Note donor site closed with full thickness graft.



Fig. 4a.—Three months postinjury, healed and back at work.



Fig. 1b.—Avulsion of soft tissue volar aspect of the thumb in water skiing accident in 19-year-old college student.



Fig. 2b.—Neurovascular island pedicle flap from ulnar side of ring finger elevated. Volar and dorsal darts increase area of pedicle and break up graft-skin juncture.

be severed and ligated to free the neurovascular flap so that it can reach its new location without tension. Similarly, the junction of the proper digital nerves needs to be split to increase the length. The island of skin tethered by its vitalizing neurovascular bundle is then passed subcutaneously to its new location on the volar aspect of the thumb. With healing and use, sensation from this volar covering becomes accepted as originating from its new location. This one-stage acute reconstruction is recommended if the wound is clean and no more than ten hours have elapsed since the initial injury. Other methods of treatment would include initial coverage of the thumb with an abdominal pedicle flap. After healing, reestablishment of sensibility could then be done by the island pedicle technique just described.

As previously stated, an island pedicle flap is also suitable for defects on the distal portion of the index finger. It is not recommended for defects of the long, ring, or little finger where the necessity of acute sensibility is less demanding. Tissue defects in these areas can be covered satisfactorily by other techniques.[4]

Loss of sensation over the radial side of the index finger is a crippling problem. When nerve reapproximation cannot be done or has been done without success, the normally sensitive skin from



Fig. 3b.—Healed with satisfactory functional and cosmetic results.



Fig. 1c.—Anesthesia radial aspect of index finger in carpenter. Four previous operative procedures included an unsuccessful nerve reapproximation. Normal ulnar skin elevated and transferred to radial side. Remaining defect will be closed with full thickness graft.



Fig. 2c.—Normal sensibility three months postoperative.

the ulnar side of the index can be brought over as an island pedicle for resurfacing the radial side. The insensitive radial skin is excised and discarded. Darts should be outlined on the ulnar side of the pedicle to increase the amount of tissue transferred and to break up the resultant volar incision after the flap is switched to its new location. The remaining areas of skin defect are then closed with full thickness grafts. Contrary to the case shown (Figs. 1c-2c), a shorter flap is better, resurfacing only the distal two phalanges of the index. This shorter flap will insure preservation of the one remaining dorsal branch of the radial digital vessel. Therefore, the blood supply of the dorsal skin of the finger is assured.

Loss of the volar fat pad over the index finger produces a painful and useless tip. This can be corrected by elevation and advancement of a volar flap if the area is not too large. If a larger area needs resurfacing, the base of the volar flap can be cut across in the distal palm preserving the neurovascular bundles and making it a true island pedicle. Gentle dissection of the vessels in the palm with slight flexion of the metacarpophalangeal and interphalangeal joints will enable the finger tip to be resurfaced. One dorsal branch of the digital vessel should be preserved to assure the blood supply to the dorsum of the finger. The palmar defect is then closed with a full thickness graft. In this way, the fat pad and normally sensitive skin of the finger tip is reconstructed.

Conclusion

Several techniques have been presented for correcting defects of the thumb and index finger utilizing the principle of the island pedicle flap.

We acknowledge with appreciation the photographic assistance of B. English of the Duval Medical Center in Jacksonville.

References

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Localization of the Site of Block in Patients With Complete Heart Block

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Cardiac pacemakers have come to play an important and effective and reliable role in the therapy of patients with complete heart block and are implanted for Stokes-Adams episodes, dizzy spells, nonresponsive heart failure and severe bradycardia. Localization of the site of atrioventricular block in these patients has become feasible by means of recording of intracardiac electrograms. Our technique for recording the right atrial electrogram has been previously described,[1] as has the further development of this technique for the study of atrioventricular conduction disturbances.[2,3] The purpose of this paper is to define the areas of block in patients with complete heart block. Data in four patients will be presented.

Atrioventricular Conduction

For the study of atrioventricular conduction, the right atrial electrogram is obtained in the area of the His bundle.[3,4] An electrode catheter with two electrodes (0.5 cm. apart) close to the tip is passed percutaneously from the right femoral vein into the right atrium and right ventricle. The catheter tip is then slowly withdrawn from the right ventricle to the area of the septal leaflet of the tricuspid valve in the right atrium adjacent to the bundle of His. By means of a special distribution box, a unipolar right atrial electrogram from either or both tip electrodes may be recorded simultaneously with a bipolar lead from the two tip electrodes. A limb lead is generally recorded simultaneously on a multichannel photographic recorder. The tracings in a patient with normal atrioventricular conduction are shown in Figure 1, time lines at 1 sec., paper speed 100 mm./sec. UE refers to unipolar lead and BE is the bipolar lead both in the His bundle area. A limb lead is shown for reference. On the unipolar lead, the P wave and the QRS-T complex are noted. The portion between the P and QRS waves is isoelectric in the unipolar lead as well as in the limb lead. In the bipolar lead, three distinct deflections are noted. The first, A deflection, is due to local atrial activation and starts after the P wave on the limb lead. The second is the H or BH deflection due to the local bundle of His activation and the third is the V deflection caused by local ventricular depolarization. The P-R interval of the limb lead electrocardiogram is composed of three components: P-A, A-H and H-V (Fig. 1). The interval from the onset of the P wave on the limb lead to the onset of atrial activity (A complex) on the bipolar lead is the P-A interval. This P-A interval varies somewhat with catheter position and represents intra-atrial conduction time. The interval from A wave onset to BH onset, A-H time, is a measure of conduction time in the atrial approaches to the atrioventricular node (AVN) and in the AVN itself. The upper limit of normal for A-H time is 120 msec. The interval from BH deflection to onset of V deflection, H-V

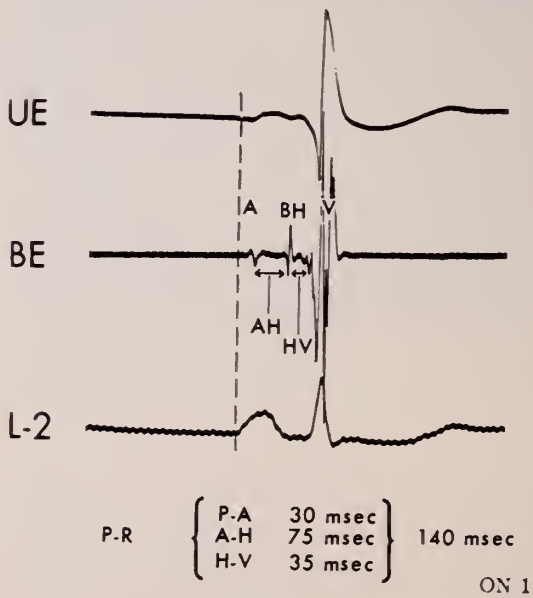


Fig. 1.—Right atrial unipolar and bipolar electrograms recorded in the vicinity of the His bundle, together with the limb lead. The P-R interval is composed of three components as indicated. See text for details.

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time, is a measure of conduction time in the His bundle and the bundle branches (right and left) distal to the His bundle bifurcation. The upper limit of normal for the H-V time is 45 msec. The P-R interval is thus composed of three intervals as indicated in Figure 1. Complete heart block may thus develop as a result of lesions in three general areas of the atrioventricular junction, the atrioventricular node (AVN), the His bundle itself, and thirdly, distal to the His bundle bifurcation in the bundle branches. A fourth possibility is multiple areas of block. Examples of these varied possibilities will be shown below.

Multiple Sites of Block

Complete heart block due to disease in the atrial approaches to the AVN, in the AVN itself or in the upper part of the His bundle is shown in Figure 2. The right atrial unipolar and bipolar electrograms and lead 2 are shown from above down. The QRS complex is normal in duration. Panel A was recorded at 50 mm./sec. and panel B at 100 mm./sec. The most important data are shown in the bipolar BE electrogram. The A deflection of atrial activity is unrelated to the BH and V deflection of His bundle and ventricular activity respectively, i.e., the site of block is between the A and H deflections. Each A deflection is followed by neither an H or V deflection, each V deflection is preceded by an H deflection. In contrast, in Figure 3, the site of block is within the His bundle itself. The limb and precordial leads are shown in the upper panel, and the three standard limb leads and the His bundle bipolar electrogram in panel A. The QRS complex is normal in duration. On the bipolar lead, it may readily be seen that each A complex is followed by ABH complex; in addition, each V deflection is preceded by ABH' deflection. There is no temporal relationship between the A-H complexes and the H'-V complexes proving complete heart block. The presence of two separate His bundle deflections each at a different rate proves that the lesion is within the His bundle. In panels B and C, the His bundle was paced by the same catheter used to record the His bundle deflections, at rates of 57/min. and 85/min., respectively. The H'-V activation time remained at the same 40 msec. during HB pacing as during the control curves in panel A, suggesting strongly that the His bundle was indeed being paced in panel B and C. Identity of the QRS complexes in leads 1, 2 and 3 in panels A, B and C is proof that the His bundle and not

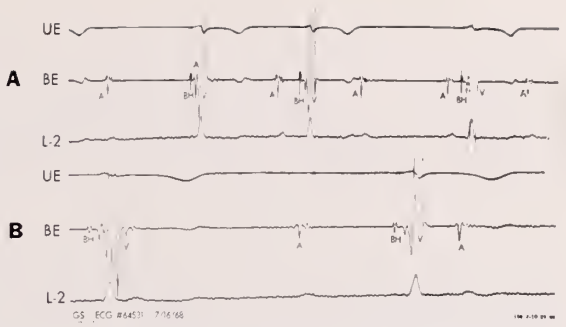


Fig. 2.—Panel A: 50 mm./sec. Panel B: 100 mm./sec. Right atrial unipolar and bipolar electrograms in the vicinity of the His bundle, together with lead 2, in a patient with complete heart block. The QRS complex is normal in duration. The A complexes are unrelated to the BH and V complexes. All V complexes are preceded by BH complexes. See text for details.

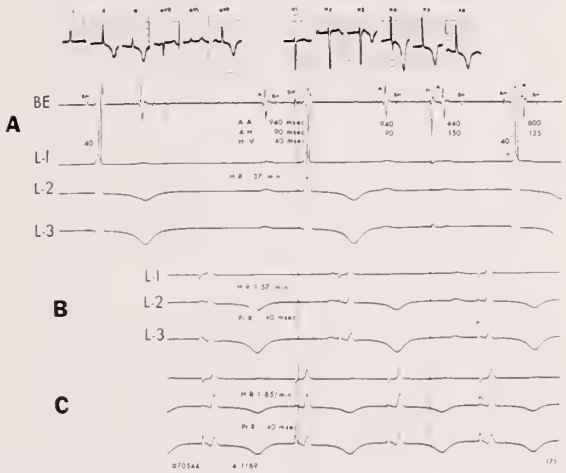


Fig. 3.—Upper strip, control electrocardiogram; the QRS complex is normal in duration. In panel A, the three standard limb leads are shown together with the His bundle bipolar electrogram. Each A deflection is followed by ABH complex, each V deflection is preceded by an BH' deflection. The site of block is therefore within the His bundle. His bundle pacing at two different rates (panels B and C) reveal A PI-R time of 40 msec., identical to the control H-V time in panel A.

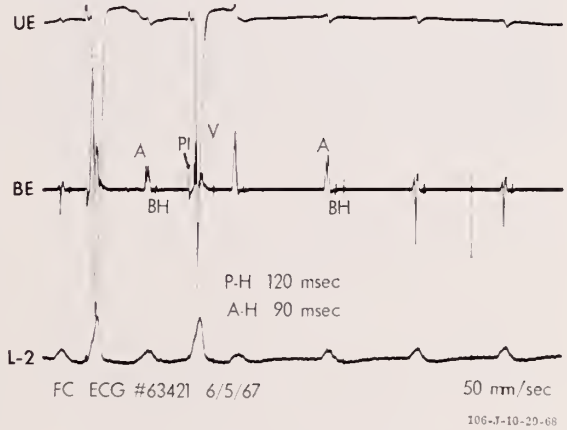


Fig. 4.—Complete heart block distal to the His bundle or in the lower portion of the His bundle. When the right ventricular pacer (left side) is turned off, transient ventricular asystole results revealing that each A complex is followed by a His bundle deflection. See text for details.

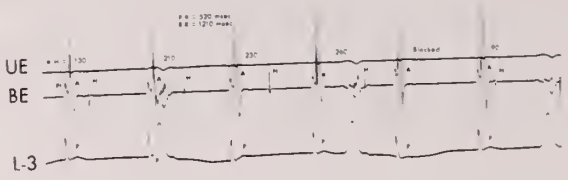


Fig. 5.—Right atrial unipolar and bipolar leads in the vicinity of His bundle together with lead 3 during control pacing. The PI is the pacer impulse. The QRS complex of lead 3 is prolonged in duration. None of the V complexes are preceded by A or H activity, i.e., the site of block is in the lower portion of the His bundle or distal to the His bundle bifurcation. In addition, Wenckebach second degree atrioventricular block is present as noted by progressive prolongation of the A-H time until an H deflection is blocked at the indicated site. See text for details.

the right bundle itself was being paced in panels B and C.

A third area of block in patients with complete heart block is shown in Figure 4. When the right ventricular pacemaker is turned off, ventricular asystole transiently results and clearly reveals that each A complex is followed by a BH deflection. A second H' deflection is never seen. The site of block is therefore in the lower portion of the His bundle or distal to the His bundle bifurcation into the bundle. Finally, multiple areas of block may occur in complete heart block (Fig. 5). The right atrium is paced in Figure 5 (PI refers to pacer impulse). Each pacer impulse is followed by a P wave, or an A complex on the bipolar lead. The QRS complex is prolonged in duration. Most A complexes are followed by H deflections, but the V deflections are temporally unrelated to the A and H deflection on the bipolar lead. The QRS complexes are temporally unrelated to the P waves in lead 3. One site of block is therefore, as seen in Figure 4, in the lower portion of the His bundle or distal to the His bundle bifurcation in both bundle branches. The second site of block, as in Figure 2, is in the atrial approaches to the AVN, in the AVN itself, or in the upper portion of the His bundle. This second level of block, however, is Mobitz type I Wenckebach block. The A-H activation time is 130 msec. in the first complex of Figure 5. The A-H time progressively lengthens to 260 msec. and the next A deflection is blocked, i.e., the H deflection is dropped as in the Wenckebach type of second degree atrioventricular block. Two sites of block, one complete third degree atrioventricular block and the other, second degree block are thus revealed in Figure 5.

These data reveal that there are at least three sites of block in patients with complete heart block. Our present inability to consistently record and validate atrioventricular node potentials precludes definition of other areas of block at this time.

Summary

Three distinct sites of block in the atrioventricular junction have been defined in patients with complete heart block. His bundle recordings have been obtained which verify the existence of these three sites. An example of multiple sites of block is also provided.

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Hunter-Hurler Syndrome

A Prototype for the Study of Storage Disease

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Genetic diseases are with few exceptions characterized by enzyme deficiency. Such lesions result in clinical entities characterized by accumulation of products of metabolism, e.g., acid mucopolysaccharides (AMPS). As a consequence of a deficiency in catabolic enzymes (degradative), macromolecules accrue. Examples are Von Gierke's Disease[1] (glucose-6-phosphatase deficiency) and Hers Diseases (amyo-1, 6-glucosidase deficiency).[2]

The accumulation of mucopolysaccharides in the Hunter-Hurler syndrome may be a consequence of another mechanism. Acid mucopolysaccharides (polymers of repeating units of uronic acid and hexosamine) are important molecular components of the cardiovascular, optic, musculoskeletal and reticuloendothelial systems. In the normal state these macromolecules are covalently bound to protein as a glycoprotein. A defect in the formation of the covalent glycoprotein linkage or in the protein might result in the accumulation of acid mucopolysaccharides. Investigation of the pathogenesis and genetics of this syndrome affords insight into the generality of these mechanisms.

Clinical Complex

There are four definable variants of this syndrome. They are: (a) Hurler variant—excretion of chondroitin sulfate B (CSB) and heparatan sulfate (HS); (b) Hunter variant—mixed excretor; (c) San Fillipo variant—predominant excretion of HS; (d) Scheie variant—predominant excretion of CSB. The Hunter form is sex-linked recessive and the others are autosomal recessive. Many authors further subdivide this grouping;[3,4] however, no unequivocal supporting data exists.

The natural history of this disease is one of progressive deterioration and involvement. Children afflicted with this disease usually develop normally for the first six months of life; sometime between six months and two years stigmata of abnormal development appear. Most frequently, such patients present initially with persistent umbilical hernia, hepato- and/or splenomegaly and slightly coarse facial features. Often an early finding is the reversal of the normal lumbar lordosis first noted with certainty by the parents when the child is able to sit. Less constant early findings are enlargement of the head and moderate loss of auditory and visual acuity.

With the passage of years the excessive deposition of AMPS results in the classical deformities of this syndrome. The eyes frequently show a diffuse, homogenous, graying haze involving the cornea. The production of loud noises often evokes no response in the patient—a manifestation of the deposition of AMPS in the ossicular chain of the ear. Rhinorrhea is frequently present. Often there is cardiomegaly with organic cardiac murmurs. Many additional findings may be seen—the most worthy being internal hydrocephalus which occurs frequently.

This syndrome is a genetic error of metabolism. The incidence of the autosomal recessive variant is 1:10,000 live births, whereas the incidence of the sex-linked variant is about 1:40,000 live births.[3] In general the sex-linked type exhibits a milder clinical course and the occurrence of corneal opacities is significantly less common.

The differential diagnosis is one of dwarfed children with multiple deformities and hepatosplenomegaly. Isolated reports of the concomitant occurrence of Tay-Sachs disease and Hurler's syndrome appeared in the literature,[5] but they were not well documented.

Laboratory Diagnosis

The cardinal finding is the demonstration of increased excretion of urinary acid mucopolysaccharides. Various screening procedures permit the

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demonstration of increased total urinary mucopolysaccharides: (1) the acid albumin technique of Dorfman[3] and (2) the demonstration of toluidine blue inclusions of urinary sediment. Conclusive demonstration is carried out by the qualitative and quantitative isolation of acid mucopolysaccharides with quaternary ammonium salts and their identification by chromatography or electrophoresis.

Pathogenesis and Etiology

In 1965 Danes and Bearn[6,7] demonstrated that tissue cultured fibroblasts obtained from children with Hunter-Hurler syndrome stained metachromatically with toluidine blue. This characteristic was due to intracellular accumulation of mucopolysaccharides. Since the initial studies, metachromatic staining of cultured fibroblasts has been demonstrated in several disease states.[8]

The applicability of cell culture techniques to the study of metabolic errors has been confirmed by demonstration of known enzyme deficiencies in other diseases[9]—cystathionine synthetase in homocystinuria, galactose-1-phosphateuridyl transferase in galactosemia, alpha 1-4 glucosidase in Pompe's disease, hypoxanthine guanine phosphoribosyltransferase in Lesch-Nyhan syndrome (X-linked uric aciduria), aryl-sulfatase A in metachromatic leucodystrophy, and others. These studies suggested that fibroblast cultures might serve as tools for their antenatal diagnosis.[9]

In Hunter-Hurler syndrome tissue culture systems employing H^3-acetate and S^{35}-sulfate indicated an abnormality in the rate of degradation of mucopolysaccharides resulting in accumulation in amounts five to ten times greater than normal.[10] The kinetics of turnover investigated by Fratantoni et al[11] proved that the accumulation and secretion of labeled polysaccharide was normal in the Hurler cells during the first five hours and that later accumulation was a consequence of defective enzymatic degradation.

Intravenous administration of a millicurie of S^{35}-sodium sulfate to a child with Hurler's syndrome showed a prolonged retention of label in blood and urine when compared to a control subject.[12] This observation supports the thesis of defective degradation. The antenatal diagnosis of Hurler's syndrome has been made by demonstrating metachromatic staining and characteristic incorporation of S^{35}-sulfate into intracellular mucopolysaccharides in cells obtained by amniocentesis late in gestation of women who had affected children.[9,13] Such model systems provide a means of testing and evaluating potential therapy.

1. Retinol (vitamin A alcohol) promotes the release of mucopolysaccharide from cells and tissues with a concomitant loss of metachromasia. Vitamin A increases the permeability of lysosomal membranes, and lysosomal proteases leak into the cytoplasm.[14] Administration of retinol in subtoxic doses to patients resulted in an increase in urinary mucopolysaccharides.[15] Long-term studies, however, have not shown any improvement in the clinical course.[16]

2. Addition of ascorbic acid to cell cultures increases the synthesis and storage of mucopolysaccharides in Hurler fibroblasts and in normal fibroblasts.[17] Analysis of aorta from scorbutic guinea pigs showed decreased levels of dermatan sulfate.[18] These findings suggested that a diet deficient in vitamin C might reduce the synthesis of polysaccharides in the Hunter-Hurler syndrome. However, a one-year trial of an ascorbic acid deficient diet in an infant with the Hurler syndrome did not alter the progression of the disease.[19]

When cells of the Hunter or Hurler type are grown together or with normal fibroblasts in the presence of S^{35}-sulfate, there is apparent correction of the defect with release of dialyzable labeled sulfate into the medium and decrease in cellular metachromasia.[20] An extension of this approach is to fuse cells obtained from patients with different clinical variants of the syndrome with each other or with normal fibroblasts. If it is possible to normalize metabolism in the hybrid cell without producing any pathogenic effects is it possible to introduce normal genetic material into individuals in this way?

Lysosomal Defects

Since the discovery in the mid 1950's of subcellular particles containing a variety of acid hydrolases, a number of specific functions have been credited to the lysosomes.[21] In the early 1960's Hers' observation of large swollen lysosomes and a deficiency of alpha-1, 4-glucosidase in Pompe's Disease (Type II glycogenosis) led to the concept of "lysosomal storage diseases."[2,22,23] A number of enzymes have been investigated in patients with both the autosomal and the sex-linked recessive varieties of the Hunter-Hurler syndrome with no significant differences found between the two.

Beta-galactosidase deficiency in liver, skin and

brain tissue is the most consistent significant finding observed in patients with the Hurler syndrome.[24-29] This is not due to the presence of a soluble, endogenous inhibitor.[25,27] Activity is generally increased in the plasma,[27-29] although it may be close to control values in some patients with sex-linked Type II or Hunter variant.[28] Leukocyte β-galactosidase appears to be normal,[24] while in kidney and spleen it has been reported as normal[24] or decreased.[25]

Other enzymes studied include N-acetyl-β-glucosaminidase[25-29] and N-acetyl-β-galactosaminidase; both have been shown to be elevated in liver.[25] The lysosomal hydrolases, β-glucuronidase,[24-28] alpha-fucosidase[24,26] and alpha-mannosidase are reported as either normal or increased in a variety of tissue sources. Beta-glucosidase and acid phosphatase are increased in liver and brain tissue,[25] while the latter was shown to be normal in one study on plasma.[27] Alpha-glucosidase, β-xylosidase, and the cathepsins A, B, C and D have all been reported elevated in liver tissue.[25]

A presumptive heterozygote, the mother of two patients with the sex-linked Hunter variant, showed levels of β-galactosidase in the skin which were moderately decreased to approximately one half that of controls. Her N-acetyl-β-glucosaminidase level in the skin was elevated moderately to a value between the activities expressed by controls and patients. In her plasma, the β-galactosidase was elevated but the N-acetyl-β-glucosaminidase was not significantly different than the controls.[29]

Ockerman and Hultberg[30] have shown that normal liver β-galactosidase, fractionated on a Sephadex column, has three peaks, each with a different pH optimum. Fractionated enzyme from patients with the Hurler syndrome shows a reduction in two of the three peaks. In addition, Ho and O'Brien[31] have shown three components with starch gel electrophoresis and a marked deficiency in the two slow moving thermolabile peaks in patient material. These data help to explain some of the changes in the physical and chemical properties of the enzyme in patients,[34] but also suggest that normal or elevated enzyme levels in some tissues may be due to an elevation of one of the isoenzymes.

Our own data on autopsy tissue from four patients with the Hurler syndrome indicate that β-galactosidase levels are less than 10% of the control values while acid phosphatase activity is twice that found in control livers. Levels of these enzymes are comparably altered in brain tissue. In addition, β-N-acetyl-glucosaminidase hexosaminidase levels in the patients' livers were three times values reported for normal liver tissue, whereas it was normal in brain extracts.

Summary

The increased accumulation of acid mucopolysaccharides in patients with Hunter-Hurler syndrome is a common denominator to all the clinical variants. The primary metabolic defect has not been defined; however, there appears to be decreased catabolism of these macromolecules. The application of tissue culture techniques to the study of this disease has resulted in: (a) the detection of the carrier state, (b) an experimental model for evaluation of therapeutic approaches and (c) a tool for the study of the biochemical defect.

References may be obtained from the authors upon request.

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Effects of Growth and Endocrine Problems on Learning in Children

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The effect of variations in growth and endocrine metabolic function on scholastic achievement in children involves two questions. One is the physical effect of such variations on neurologic differentiation and growth. The other concerns the child's self-image and ability to perform at his intellectual level despite the anxieties associated with his physical differences from other children.

Differentiation and Growth

Normal development of the brain can be impaired for a number of reasons within the context of our topic. When there are errors of metabolism, toxic metabolites can accumulate and cause damage. Occasionally, destruction can occur as a result of metabolic disturbance in the mother. Children born to mothers with elevated levels of phenylalanine in their blood are seriously subnormal intellectually, to a greater degree than their phenylketonuric mothers, despite the fact that the children themselves do not have phenylketonuria. Their exposure during fetal development to the elevated levels of blood phenylalanine coming from the phenylketonuric mother produces irreparable neuronal damage at a critical period in development.[1]

In children with congenital absence of thyroid function, many aspects of development are demonstrably retarded and roentgen studies of the epiphyses often indicate a prenatal level of maturation. Thyroid hormone is needed by the developing brain for protein synthesis and energy metabolism. Complete replacement therapy with thyroid hormone in the first few weeks of life will usually result in the attainment of normal intelligence. Recognition and treatment of hypothyroidism by the third month of life or later is associated with much poorer results.

The essential fuel for brain metabolism is glucose. Unlike other tissues in the body, the brain cannot metabolize fats for its energy and is entirely dependent upon the maintenance of blood sugar. Thus, a number of conditions resulting in hypoglycemia carry with them the risk of suffocation of the developing central nervous tissue. If recognized, hypoglycemia can be managed and permanent brain damage prevented. Even when detected late, considerable improvement in scholastic performance can occur when the child's blood sugar is maintained at a level allowing his brain to function maximally.[2]

During starvation a number of compensatory processes occur which allow blood sugar to be maintained despite inadequate food intake. However, in severe malnutrition, the total energy level decreases. Endocrine activity and intellectual growth decrease along with linear growth. The permanent effects of this depend on the kind of malnutrition, its severity and duration. It has recently been observed that Chilean infants who died of malnutrition had lower levels of DNA in their brains, indicating a reduction in the number of neurons compared to non-malnourished agemates dying for other reasons. Thus, in some cases, loss of neurons from starvation is an irreversible process. The loss of intellect as a result of worldwide malnutrition can only be speculated upon.[3]

Morphologically abnormal children often have statural and intellectual impairment as features of their disorder. Down's syndrome or mongolism would be an obvious example of this group. It was observed among 2000 patients at Pacific State Hospital in California that retarded children are generally well below statural norms for age and that a positive correlation exists between stature and IQ in this group.[4] The stunting of the children studied was not a function of metabolic disturbance or duration of institutionalization.

The converse question is whether children with subnormal growth are behind their more

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rapidly growing age-mates in mental ability. In children who have short stature as a result of hypopituitarism, there is no adverse effect on intelligence. A large study of intelligence differences between early and late maturing boys and girls showed a small but significantly higher mental age in the early maturing children at all ages. The difference in intelligence test scores between the early and late maturers vanished as growth was completed.[5] It becomes clear, then, that development of the central nervous system and intelligence is autonomous in most of the circumstances of growth failure that we see clinically.

Girls with Turner's syndrome are short statured as the result of absence of or defect in one of the X chromosomes. Their IQ distribution is close to that of a normal population. However, they demonstrate a significant discrepancy between a relatively low performance and high verbal IQ paralleled by discrepancy between verbal comprehension and perceptual organization. Thus, these girls have a space-form blindness that appears to be part of their basic abnormality and could cause incongruities in their school work.[6]

Klinefelter's syndrome is the genetic countertype of Turner's syndrome. Boys with this condition have an extra X chromosome and fail to undergo full sexual maturation at adolescence. Though they have a greater than normal frequency of retardation, the syndrome is found at all intellectual levels. They show none of the discrepancies in performance seen in Turner's syndrome.

Sexual precocity is the appearance of significant adolescent development before eight years in girls and ten years in boys. In some cases this is due to an abnormality in the central nervous system and intellectual impairment may be present. In most cases no central nervous system defect is demonstrable and intelligence is normal. Children with precocious sexual maturation show a verbal IQ elevation which has been related to social advantages conferred by the child's older appearance for age. However, the converse, a relative delay in verbal attainment, is not seen in children who are much younger appearing than their age—those individuals with hypopituitarism.

In most circumstances the child's capacity to adjust to great and obvious differences between himself and his peers is the critical factor in the effect of his disorder on learning. Rather than explore the adjustment problems of all the endocrine disorders seen in children, we can discuss the plight of the short-statured child and, in doing so, make comments that can be generalized in some respect to the child with diabetes, with obesity, with sexual precocity, or with a lack of sexual maturation.

Self-Image and Ability

Children with short stature are made to feel different and unacceptable by adults as well as children. Their complaints about being short reflect the insensitivity of the people with whom they are in contact. Their statural deviation gives them a notoriety that leaves no place to hide. If they react good naturedly to the kidding that goes along with the fame, they often find themselves acquiring protectors and serving somewhat as mascots in groups of other children their age. This can lead to sufficient relaxation of tensions to allow their true worth to be realized. The community treats the child by his appearance rather than by his age. This phenomenon makes the child's efforts and success at achieving a level of social maturation consistent with his age a remarkable accomplishment.

How well do short-statured children do in scholastic performance? One study from Shaker Heights, Ohio, has shown that the drop off in grade level from early elementary years to high school graduation was three to eight times greater in boys with poor growth records as compared to boys with normal growth records. In a study of 13 school-age children with hypopituitarism, the psychoendocrine study section at Johns Hopkins University found that not one child was doing above average work and that all were underachieving. This group felt that these patients were directing their energies to peer group acceptance to the detriment of their scholastic performance.[7] A study of ten children with hypopituitarism found that nine had made a satisfactory social and scholastic adjustment. Six of them were doing above average work and only one boy was underachieving.[8] The difference between these studies may reflect a variation in the attitudes toward acceptance and understanding of the short-statured child by parents, teachers and physicians. The physician and others in the community may encourage the development of attitudes which allow the child to adjust normally for his age, or these persons may inadvertently thwart such development. The principal effort with the patient with hypopituitarism should be to emphasize the

pituitary defect as the only abnormality. This allows the patient and his family to view the child's short stature as a discrete problem in an otherwise normal child who is then seen as being capable of adequate social and intellectual performance. The individuality of these children beyond the superficiality of their short stature has been borne out by personality studies. Extensive testing of personality indicated that short-statured children with hypopituitarism are as different from one another as any group of children; no common personality factors could be identified.[8] Too often, the child with a statural problem or any prominent abnormality is lost inside his problem. Physicians speak of dwarfs[7] rather than children with short stature. Emphasis in the clinic, the home and the classroom must be on what is normal about the child and that expectations are based on this normality, not on what is different about him. The word dwarf and the point of view which this term engenders should be assiduously avoided. Emphasis must be placed on the importance of treating the child according to his age, not his size. The effect of this effort should not be underestimated.

Thirty years ago an article in the "Proceedings of the American Association of Mental Deficiency" stated that small stature created serious problems in personality adjustment since these children were treated younger than their age. It was observed that some developed compensatory behavior in the form of minor delinquencies or excessive self-assurance; others played a baby role and some were quite normally adjusted. The differences seemed to be due to how they were treated at home and in school. This interpretation remains valid.

Conclusion

Despite our remarkable advances in understanding endocrine problems and abnormal growth, our ability to affect most of them remains sadly limited. What is more important, however, is that we do have the ability to recognize the special educational stresses children with these problems are under and can do much to help destigmatize them, allowing them to find acceptance through social and academic performance.

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Hepatic Amebiasis

Frank C. Bone, M.D., Manoochehr M. Lari, M.D. and Robert B. Trumbo, M.D.

Amebiasis is endemic in the American tropics but reliable surveys of this territory are scarce. In North America most surveys have been conducted in the United States and east of the Mississippi River where the population is more dense. Usually rural populations have a higher incidence than do urban groups, but in areas like Chicago and San Francisco this is not true. Native American Indians included in survey groups (Wyoming and Oklahoma) are consistently more heavily infected than the Caucasian population, but a report a few years ago from New Orleans showed a higher incidence of E. histolytica in the white race than in the black. In some countries like Mexico, where it is highly prevalent, it produces high morbidity and mortality. In other countries, it is quite prevalent but rarely in man.

Experimentally it was found in guinea pigs with amebic lesions in the cecum that the amebae frequently passes through the blood stream to the liver but do not become established there. Also amebae introduced through the mesenteric vein in normal guinea pigs do not produce hepatic abscess. So there must be certain unknown factors which influence the amebae in the host in producing the hepatic abscess. The studies by Maegraith and Herinasuta indicate that production of an abscess in the liver by E. histolytica requires a previous intestinal amebic infection, but this possibility is not true for all cases. Some other studies show that hypercholesterolemia favors colonization of E. histolytica and formation of an abscess in the liver. Why this happens, we do not know.

The patient described in this presentation is a native of Iran where amebiasis is not common. Other than the usual childhood diseases and two small kidney stones three years previously, his health had been excellent.

Report of Case

The patient, a 32-year-old white unmarried male physician, had resided in the United States for about two years. Four days prior to admission to the hospital he had an onset of cramping, generalized pain in the abdomen after defecation. The pain persisted throughout the day. He vomited twice, became restless and exhibited profuse sweating. The following day the pain became localized in the right upper quadrant. There was no fever, cough or shortness of breath. The day prior to admission he became very ill and experienced slight exertional dyspnea. He stated that worm infestation such as ascariasis, oxyuriasis and occasionally echinococcus is present in his country, but amebiasis is not common. The tuberculin skin test showed a positive reaction but this is common among people from Iran. The temperature was 98.6, pulse rate 90, respirations 20, and blood pressure 120/80.

On examination he appeared well developed, moderately obese, slightly dyspneic with sunken eyes and was perspiring. He was not jaundiced. Chest x-ray showed elevation of the diaphragm and mild infiltration in the right lung base. The gallbladder appeared normal. There was no lymphadenopathy and no abnormalities of the extremities, or of the eyes, ears, nose and throat. There was slight dullness at the base of the right lung. The abdomen was soft and tender over the right upper quadrant but with no organomegaly. There were no neurological abnormalities.

Laboratory Findings: Hemoglobin 11.6 Gm.%; hematocrit 32; white blood cell count 12,000; urine, many oxalate casts; bilirubin 1.1 with direct of 0.4 and indirect 0.7; SGPT 288; SGOT 320; electrolytes, normal; amylase 32, thymol turbidity 4; cephalin flocculation, trace; serum iron 32 mcg.; IBC 222; iron saturation 14%; cold agglutination, negative; VDRL negative; BUN 12; protein 6.3 Gm.%; A/G ratio 1:2; echinococcus diagnostic titer negative; bentonite flocculation, negative; stool, cysts of E. histolytica; stool culture, positive.

Chest x-ray again showed infiltration and pleural effusion (Fig. 1).

The liver scan revealed a large area of the right lobe which took up no isotopes, thus indicating a space occupying lesion (Fig. 3). Following aspiration of 600 cc. of blood (because of hepatic amebiasis), a second scan showed the same size defect. No growth or amoeba was found in the fluid obtained from the cyst. Daily EKG showed an occasional abnormality in the T waves possibly due to anemia or electrolyte imbalance.

Treatment consisted of emetine 60 mg. subcutaneously daily for ten days, chloroquine 250 mg. orally four times a day for two days then 250 mg. four times a day for 19 days, Diodoquin orally four times a day, Achromycin, multivitamins, plus sedatives and medication for pain. An EKG was run daily.

Chest x-ray 11 days later showed marked elevation of the right leaf of the diaphragm with associated enlargement of the liver (Fig. 2). About 50 cc. of straw-colored fluid was obtained by thoracocentesis. Culture revealed no organisms.

On the 21st hospital day, the cyst and necrotic material were evacuated surgically. The liver was opened revealing a large cavity extending to the diaphragm and involving the right lobe. Approximately 1100 cc. of blood-stained fluid was obtained. After biopsy the cyst wall was marsupialized to the intercostal bundles with interrupted chromic catgut sutures and the liver closed with silk sutures.

The microscopic report stated: "The inner layer is mainly an acellular fibrinous material in which numerous small round organisms are found. These organisms are in the range of 20-30 microns and are identified as amoeba histolytica."

From the internal medicine and surgical departments of Orange Memorial Hospital, Orlando. Drs. Bone and Trumbo are in private practice in Orlando. Dr. Lari was a medical resident at Orange Memorial Hospital.



Figure 1

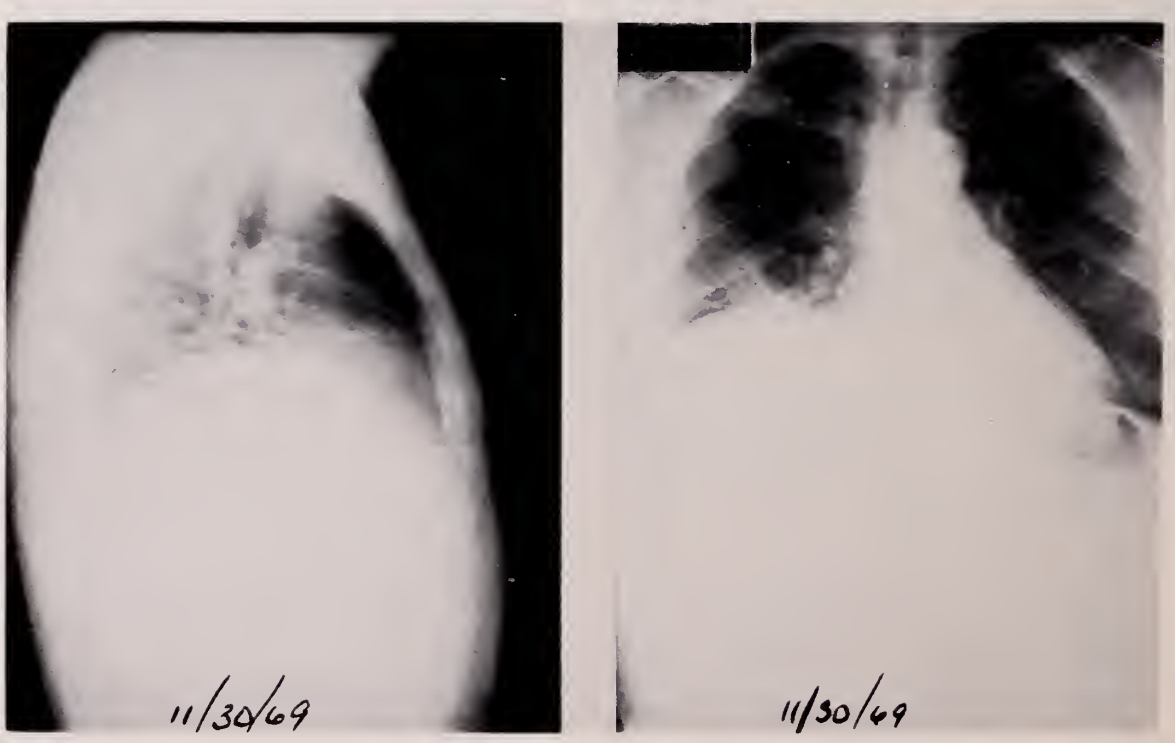


Figure 2



Figure 3



Figure 4

The patient was allowed out of bed in three days and discharged on the ninth postoperative day. Liver scan 29 days after surgery showed significant improvement (Fig. 4).

Discussion

It is generally agreed that E. histolytica enter the liver through the portal system. Sections from patients with amebiasis have shown the ameba in the capillaries and venules of the intestines, submucosa and muscularis and in portal tributaries. Other routes are direct extension through the intestinal wall, peritoneum and capsule of the liver, and the lymphatic system. Amebas probably are carried to the liver more frequently than indicated by incidence of hepatic infection for, as Faust has shown, the hepatic parenchyma appears to possess an amebostatic factor.

The most significant factors in actual development of amebic hepatitis and hepatic abscess are production by the amebas of intrahepatic portal thrombosis and infarction, and cytolytic activity of the amebas. When amebas become lodged in the smaller portal radicles in sufficient number, thrombosis with infarction and consequent focal necrosis may ensue. Cytolytic activity permits lysis and destruction of the involved hepatic parenchyma at the earliest stage of abscess formation.

In most cases of amebic hepatic abscess, there is a previous history of diarrhea or dysentery. The development period here, as in amebic dysentery, usually is uncertain. Most abscesses appear within one to three months after onset of dysenteric symptoms. Clinical manifestations may be systemic and local. Systemic symptoms in order of frequency include fever, loss of weight, weak-

ness, severe chills and profuse sweating, nausea, malaise and anorexia. The fever usually is low grade, intermittent or remittent, and may vary considerably due to occurrence of secondary infections. Weakness and loss of weight are more prominent in advanced cases whereas anorexia, nausea and vomiting are more likely to occur in the early stages. Chills and sweating are encountered more frequently in the acute and subacute forms and in abscesses associated with secondary infection. The earliest common sign is severe pain in the right upper quadrant of the abdomen in the region of the liver. It may be pleuritic and accentuated by deep breathing. Usually the pain radiates to the right shoulder due to irritation of the diaphragm.

In the chronic form of the disease, the liver may be enlarged and palpable. So far there has been no report of enlargement of the spleen. In most patients examination of the lungs show consolidation of the right lower zone, signs of pleurisy or an effusion, which may be blood stained.

Usually hepatic function tests prove normal. The serum alkaline phosphatase level is moderately elevated and the amount of Bromsulphalein slightly abnormal. Cysts and vegetative forms should be sought in several fresh stool specimens. They may be found in 20% to 50% of patients, most frequently in the early stages of the disease. Sigmoidoscopy should always be performed.

The complement-fixation test has had limited use. Before treatment in some patients results have proved negative and after treatment positive. Usually there are no definite false positive reactions. The duration of a positive antibody titer after adequate therapy indicates uncertainty in involvement of the liver. Incomplete observations suggest, therefore, that this serologic test may have prognostic as well as diagnostic value.

The fluorescent antibody and gell diffusion tests give more reliable results and usually are positive only in hepatic amebiasis. Hyperleukocytosis with eosinophilia can be seen usually in the range of 12,000 to 20,000 cu. mm. If this goes up, that means a secondary infection, usually a mild anemia. The best clue to diagnosis is a hypochromic stool examination.

Roentgenography is a particularly useful diagnostic procedure. Fluoroscopic examination usually reveals elevation or immobility of the right leaf of the diaphragm. Varying degrees of pulmonary and pleural reaction may be observed in the right basal area.

Immunity to infection with E. histolytica may exist but recovery from amebiasis does not confer immunity against reinfection. In endemic regions certain individuals escape infection but it is not known whether this is due to natural immunity or to lack of exposure. That many infected individuals present no symptoms is well known. It is possible that they possess a relative immunity. An antigen injected into susceptible animals produces complement-fixing bodies in the blood serum; thus demonstrating a reaction and possibly immune bodies.

Conclusions

With modern therapeutic measures the prognosis of infection with E. histolytica has been greatly improved; however, the longer the infection exists the less favorable the prognosis. In amebic hepatitis and abscess of the liver it is favorable if there are no complications but hopeless in abscess of the brain.

Emetine is the drug of choice for treatment of hepatic amebiasis but its action on a cyst is poor. The patient may experience vomiting, nausea, vertigo and headache. The EKG must be closely watched. The second choice is chloroquine which is well absorbed and has a high concentration in the liver. The third choice is Diodoquin which contains 63.9% iodine and is tolerated well by patients. No toxic symptoms have been reported except mild headache. Needle aspiration is employed if an hepatic abscess can be demonstrated clinically, localized radiologically or by liver scan. Before aspiration, the patient should be treated therapeutically.

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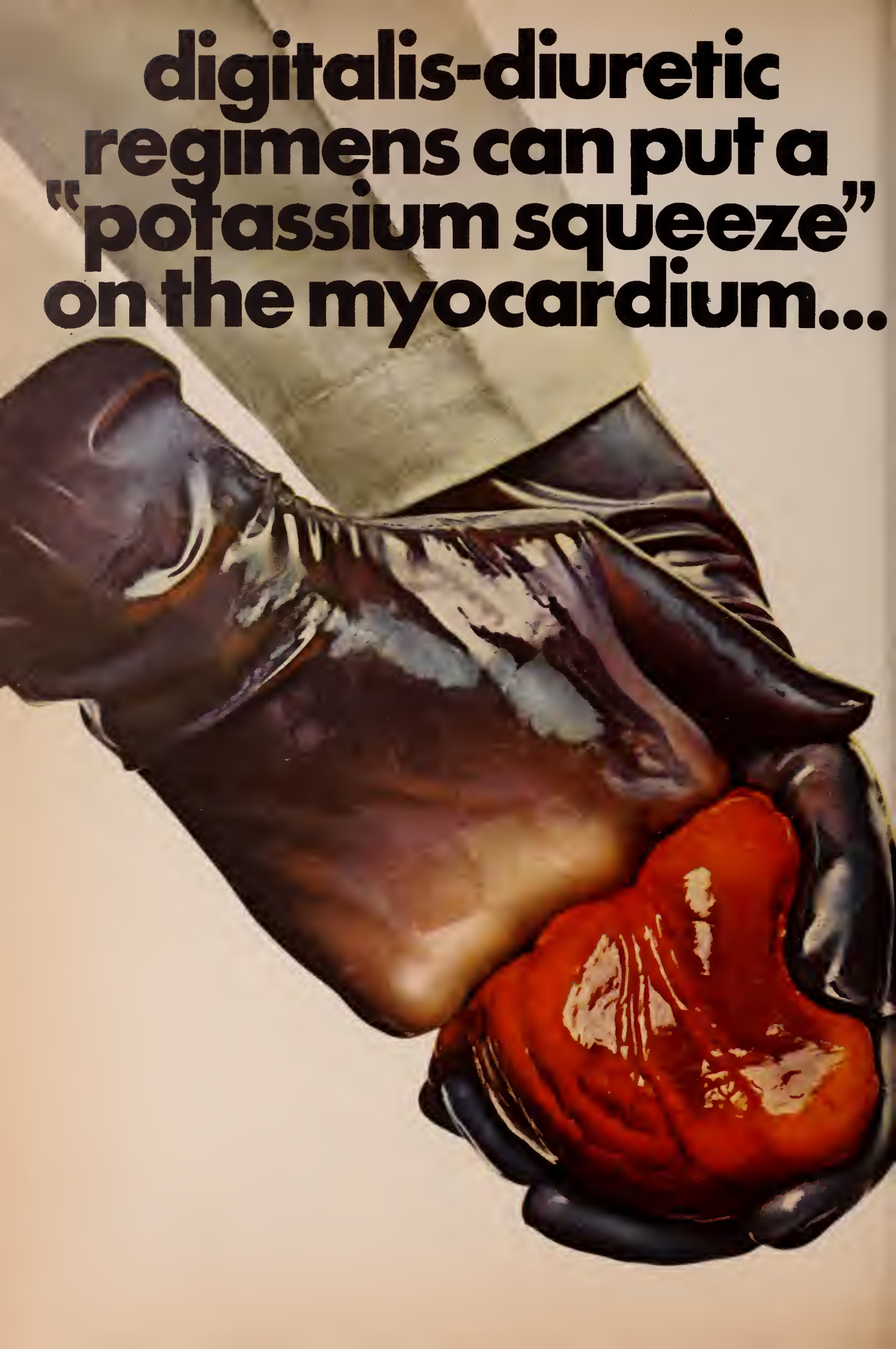
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Indications—Essential hypertension; edema or ascites of congestive heart failure, cirrhosis of the liver and the nephrotic syndrome; idiopathic edema. Some patients with malignant effusions may benefit from Aldactone, particularly when given with a thiazide diuretic.

Contraindications—Acute renal insufficiency, rapidly progressing impairment of renal function, anuria and hyperkalemia.

Warnings—Potassium supplementation may cause hyperkalemia and is not indicated unless a glucocorticoid is also given. Discontinue potassium supplementation if hyperkalemia develops.

Usage of any drug in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the mother and fetus.

Precautions—Patients should be checked carefully since electrolyte imbalance may occur. Although usually insignificant, hyperkalemia may be serious when renal impairment exists; deaths have occurred. Hyponatremia, manifested by dryness of the mouth, thirst, lethargy and drowsiness, together with a low serum sodium may be caused or aggravated, especially when Aldactone is combined with other diuretics. Elevation of BUN may occur, especially when pretreatment hyperazotemia exists. Mild acidosis may occur. Reduce the dosage of other antihypertensive drugs, particularly the ganglionic blocking agents, by at least 50 per cent when adding Aldactone since it may potentiate their action.

Adverse Reactions—Drowsiness, lethargy, headache, diarrhea and other gastrointestinal symptoms, maculopapular or erythematous cutaneous eruptions, urticaria, mental confusion, drug fever, ataxia, gynecomastia, mild androgenic effects, including hirsutism, irregular menses and deepening voice. Adverse reactions are infrequent and usually reversible.

Dosage and Administration—For *essential hypertension in adults* the daily dosage is 50 to 100 mg. in divided doses. Aldactone may be combined with a thiazide diuretic if necessary. Continue treatment for two weeks or longer since an adequate response may not occur sooner. Adjust subsequent dosage according to response of patient.

For edema, ascites or effusions in *adults* initial daily dosage is 100 mg. in divided doses. Continue medication for at least five days to determine diuretic response; add a thiazide or organic mercurial if adequate diuretic response has not occurred. Aldactone dosage should not be changed when other therapy is added. A daily dosage of Aldactone considerably greater than 75 mg. may be given if necessary.

A glucocorticoid, such as 15 to 20 mg. of prednisone daily, may be desirable for patients with extremely resistant edema which does not respond adequately to Aldactone and a conventional diuretic. Observe the usual precautions applicable to glucocorticoid therapy; supplemental potassium will usually be necessary. Such patients frequently have an associated hyponatremia—restriction of fluid intake to 1 liter per day or administration of mannitol or urea may be necessary (these measures are contraindicated in patients with uremia or severely impaired renal function). Mannitol is contraindicated in patients with congestive heart failure, and urea is contraindicated with a history or signs of hepatic coma unless the patient is receiving antibiotics orally to "sterilize" the gastrointestinal tract.

Glucocorticoids should probably be given first to patients with nephrosis since Aldactone, although useful for diuresis, will not directly affect the basic pathologic process.

For *children* the daily dosage should provide 1.5 mg. of Aldactone per pound of body weight.

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Adverse Reactions: Neither irritation nor untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occurs, decrease dosage. If rapid pulse, dizziness or blurring of vision occurs, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

Dosage and Administration: Adults: Two tablets, orally, four times per day, followed by liberal fluid intake. Older children reduce dosage in proportion to age and weight.

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MEETINGS

Approved by FMA Committee on Postgraduate Education

SEPTEMBER

25-26 Seminar on Diabetes, Sheraton Hotel, Fort Lauderdale. For information: George P. Heffner, M.D., 4602 N. Federal Highway, Fort Lauderdale 33308.

NOVEMBER

13-14 ENT for the Family Practitioner, Sheraton Four-Ambassadors Hotel, Miami. Contact: Frederic W. Pullen II, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, University of Florida, Gainesville. For Information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

DECEMBER

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

National and Regional Meetings Held in Florida

SEPTEMBER

27-28 Society of Pediatric Radiology, Deauville Hotel, Miami Beach. Sec.: John L. Gwinn, M.D., Children's Hospital, 4650 Sunset Blvd., Los Angeles, Cal. 90027.

29-Oct. 2 American Roentgen Society, Deauville Hotel, Miami Beach. Ex. Sec.: Ted F. Leigh, M.D., Emory University Clinic, Atlanta, Ga. 30322.

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

Book Review

Pediatric Therapy 1968-1969 edited by Harry C. Shirkey, M.D. Pp. 1,294. 3rd edition. 351 illustrations. Price $25. St. Louis, The C. V. Mosby Company, 1968.

The printing of three editions in four years suggests that Shirkey's "Pediatric Therapy" is here to stay. This book has established itself with "firing line" pediatricians as well as with house staff. What a pity that it is not made compulsory reading for emergency room physicians.

In the preface to the first edition the author stated his book was intended for those with a deep interest in disease; consequently, despite its modest title, Shirkey's is much more than a compendium of drugs and treatments. Particularly in this age of potent therapeutic agents it behooves the doctor to know the diagnosis before rushing in with the cure. Recognizing this, the contributors devote ample space to etiology and diagnosis, enriching the text with clinical photographs.

The new edition contains chapters on drugs excreted into breast milk, newborn special care, mycoplasma infections, rabies, systemic antimicrobial therapy, treatment of special genitourinary disorders and management of burns.

Dr. Shirkey has written 15 of the 144 chapters. His 88 co-authors are drawn from far and wide so that there can be no stigma of parochialism about this work. A book by many authors must perforce vary in its style. Some of the experts write like angels; others, equally knowledgeable, do not. Therefore, while all chapters may be read with profit some may be read with less strain than others.

Two sections of colored pages facilitate rapid reference: Common Poisons with symptoms and treatment in pastel pink and a Table of Drugs in eggshell blue. The latter lists generic and trade names, contraindications for use, warnings, cautions, toxicity and the form in which the drug is supplied.

There is a notable omission from the poison list, to wit, chlordiazepoxide (Librium), a widely prescribed tranquilizer which is inevitably finding its way into the hands and stomachs of exploring toddlers. It is to be hoped that Librium poisoning will be discussed in the next edition.

Dr. Shirkey makes an important point concerning clinical testing of drugs for infants. Many preparations which have come into use since 1962 have no recommended pediatric dosage because no field trials have been made in the appropriate age group. Children are therefore becoming "therapeutic orphans." In these circumstances where the doctor finds no guidelines in the Physicians' Desk Reference he may turn with confidence to "Shirkey's" for authoritative and down-to-earth advice.

Colin Kendall, M.D.
Temple Terrace

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. New York, Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 by Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Medical Interviewing by Robert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

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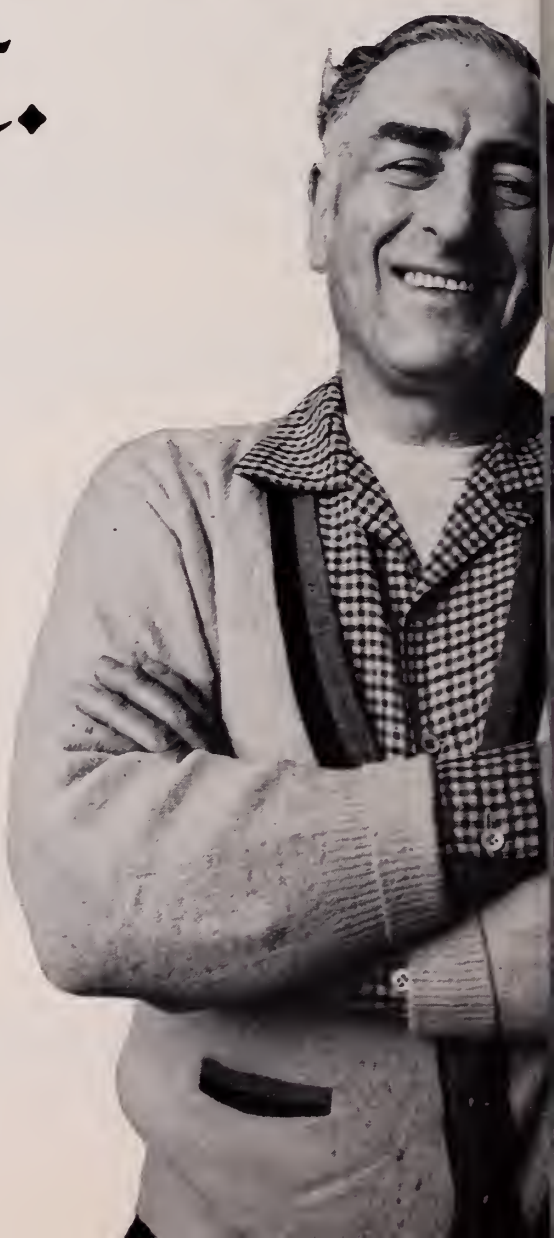
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A Unique Opportunity to Invest in the Health of America

The unusual situation of whether to accept an advertisement for the Journal arose recently when Health Screening Centers, Inc., of Denver, Colorado, submitted for our consideration a full page flier stating that it was being published in one other state medical journal and the Wall Street Journal. The notice was written with the intent of soliciting investors for the corporation, which is in the business of installing, staffing and operating facilities designed for multiphasic screening. The prospective lessee is informed that in the facility any patient can receive a periodic screening using automated, miniaturized, electronic equipment providing 40 or more physiological tests at a cost easily within the reach of the average employed individual. A comprehensive history is obtained, an EKG, chest film, B/P, tonometry, spirometry, vision, hearing, height, weight, and vaginal smear are all part of the procedure. Suggested advantages for management are reduced workers' absence due to sickness, reduction of employee turnover due to early disease detection, improved job performance and a longer productive life span. The interest of labor also is solicited, as are large and small companies, private insurance carriers and prepaid medical plans. An accompanying prospectus entitled Early Disease Detection, an Aid to Preventive Medicine points out the shortage of doctors' facilities, obsolescence in hospitals, and costly obstacles to the individual's efforts to secure medical treatment and health care. The installation may be leased or purchased but the data is forwarded to a central office for processing and return, so that through mass production capability, the price per screen can be kept to $15.

At first reading, concern arises as to what would be the consequences of this community cut-rate computer competing with local internists, general practitioners and private labs. Yet in talking this over with various hospital coffee room habitués representing various specialties, not one objected to including this in the Journal. Asserting that such testing is only a screening maneuver and where automated laboratory procedures have been initiated in his hospital, a pathologist laboratory director admitted that with the ever increasing volume of automated work requested and the various procedures ordered afterward to verify abnormal screening tests, no decrease in revenue has been noted. Consequently the patient gets a more comprehensive work-up for his money. One discourser thought that the unscrupulous doctor who gets mail order laboratory work at mass production rates and charges his patient standard or higher lab fees could with a multiphasic screening unit exploit the patient by overutilization or overcharging. This, however, could be thwarted by any ethical doctor or group setting up a competing installation and charging rates which are recommended by the manufacturer. One doctor objected to censoring any journal advertising necessary for education of the medical profession. Another reasoner argued that the Journal should get involved in such issues for this appears to be an approaching change in the practice of medicine and likely will be very popular with the patient.

Whether we like it or not, multiphasic screening is here and will, depending on our attitude, develop slowly or by leaps and bounds. At the present time, there is one national drug company initiating multiphasic screening in Florida while a

licensed corporation has plans now to set up units in two or three locations in the state. This local group is approaching medical societies, asking for advice and support in initiating the facility in their communities.

One fly in the ointment is the law of averages responsible for certain problems inherent in mass surveying so that multiphasic screening can get out of hand and physicians spend much valuable time chasing down spurious lab findings. In other words, no test for a given disease is either sensitive enough to identify all individuals who have the disease or sufficiently specific to yield negative findings in all persons free of the disease. Interpretation of typical laboratory findings is critically dependent on what statisticians call "the tolerance limits of the normal range." Thus, if a laboratory procedure has a tolerance limit of say, 95%, then the probability is that this test will yield a result within the normal range 95 times out of a hundred when applied to healthy people. The remaining 5% represent the cases that may wind up in wild goose chases for the physician. With 95% tolerance limits, the probability that the healthy individual will have an abnormal result for a single test is, of course, 5%. For two independent tests, it is 10%, for 15 tests, it is over 50% and so on. The statistical stew thickens if the normal ranges used by the laboratory are derived from populations inadequately selected for age, sex or other variables. So, if multiphasic mass screening catches on, physicians are in for a lot more head scratching. One's interpretation must be guarded if a single laboratory result is inconsistent with the remainder of the clinical data.

C. M. C.

Computer Assisted Diagnosis

Pensacola area doctors have available a computer system designed to assist in the diagnosis of acquired and congenital pediatric diseases, according to Dr. Reed Bell of Sacred Heart Hospital. The system, called Computer Assisted Diagnosis of which there are less than ten in service throughout the country, was installed in early June of this year.

To gain access to the computer, the doctor calls in via teletypewriter installed in his office or the hospital. The doctor then enters his findings with those in its memory bank of information. The computer's response is a printed listing of those diseases or syndromes which are found to be compatible with the patient's symptoms. At the same time the computer lists additional findings which have been associated with the disease. These findings, plus reference literature, provide the physician with the information to assist him in making his own final diagnosis.

CAD has benefits for both the physician and patient. Use of this program can reduce the number of laboratory tests needed for diagnosis and, therefore, shorten the diagnostic period. CAD also allows the physician's time to be utilized more efficiently. For patients this system could mean a shortened stay in the hospital.

Edited by Dr. Lewis A. Barness, professor of pediatrics at the University of Pennsylvania, the system is kept up-to-date by Dr. Barness and other leading pediatric authorities. They act as contributors to insure that the information in the computer's memory bank is as current as possible.

The system is marketed by Mead Johnson Laboratories, Evansville, Ind.

Alcoholism

A new tranquilizer for the treatment of alcohol dependence, mesoridazine,* has been developed. The new agent offers specific advantages in addition to relief of anxiety, tension and depression that may precipitate alcohol abuse. These include antiemetic properties, an apparent lack of habituating characteristics or hepatic toxicity and the availability of both oral and parenteral forms.

In preparation for release of this product, the company developing it, supported the Center of Alcohol Studies, Rutgers University, in a massive statistical survey of alcohol dependence and physicians' attitudes toward the problem including a state-by-state analysis. From the survey and other data it was shown, that while Florida ranks 12th in the total number of alcoholics, it ranks 23rd in per capita number. It was also noted that more Florida physicians (compared with the national average) report that at least half of their problem drinkers are women.

*Serentil, Sandoz Pharmaceuticals, Hanover, N. J.

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Comment

End of Tour Report

Volunteer Physicians for Vietnam

James J. DeVito, M.D.

I learned of Project Vietnam through my association and interest in Project Hope and our own Florida Medical Association program in Central America. Having worked there, it would have been impossible not to realize the far reaching potential of this kind of service from the standpoint of medical aid and improvement as well as increased good relationship and understanding. An orthopedist friend who served in Cantho three years ago stimulated my interest further; however, my decision to go to Vietnam meant months of advance planning, personal and professional.

En Route

In San Francisco, the briefing by Drs. Mosley and Smookler was quite helpful. Time prevented a detailed description of existing conditions; we curious VPVN's realized that each problem would be unique and the VPVN would have to react to the situation as it arose. On the enjoyable trip to Hong Kong, we quickly got to know our fellow VPVN's. I hope the AMA will somehow find a way to afford passage first class—at least on the long leg from Honolulu to Hong Kong. This hop of approximately 7½ hours in the 707's cramped quarters is a little uncomfortable and not without risk for some of our "aging" legs. Facilities in Hong Kong were excellent and the interim allowed for rest and shopping is a great morale factor. It also enabled the group to become better acquainted. The headquarters in Saigon at the Miramonde Hotel were quite adequate and facilities much better than expected.

Our program director, John Miller, rates high praise for assisting the doctors with their problems and despite the carnage of Saigon traffic he was remarkably punctual. It is apparent that Dr. Wilson, in his short tenure, has been expertly carrying on his various duties. His visits to many of the provincial hospital areas add greatly to the program's morale and MILPHAP teams are pleased to see him, knowing he is available for critical discussion of the differing needs of each province.

The visit to the Rehabilitation Center and prosthetics factory and seeing how well amputees adapt to their disabilities is a wise plan. Most physicians are not prepared for the amputation rate or the youth of the patients.

Vietnamese travel facilities were better than expected. Air America does a good job if given adequate notice. It should be stressed that advance notice and preparation when planning each trip will make traveling in Vietnam far less frustrating.

Assignment in Phu Vinh

My assignment was in the town of Phu Vinh in Vinh Binh province which is approximately the same size and population as St. Johns, my home county. My comfortable billet exceeded expectations and I certainly enjoyed the air-conditioning —when the power plant was working. Because of the frame type houses, there was the occasional necessity of moving to MACV facilities whenever danger threatened. Although this was not often during my stay, we were alerted to any potential danger by the PSA, Lt. Col. Ralph Girdner, USA, and his very capable staff. Col. Girdner was extremely interested in the medical program, conferring not only with his own MILPHAP teams but the VPVN's concerning numbers of casualties, types of diseases, and ways of improving civilian medical care. An exemplary officer, the Colonel and those of his staff assisted us in any community or hospital problem. I was fortunate in working with a very experienced staff of physicians, three Air Force captains, mature beyond their years and a credit to their country and profession.

One, Capt. Bud MacDougal, who after a year of surgical residency, had been in the province two years handling every phase of casualty surgery with the composure and ability of a veteran. I know I learned from him and trust that I might have been of help to him during my stay.

Another dedicated man, Capt. Steve Dickstein, a board pediatrician, had somehow established order in the dingy, overcrowded pediatric

wards. He waged a constant battle over superstition, filth and the ubiquitous disease-carrier, the house fly, which swarms everywhere making sterile technique impossible. With the same selfless dedication, three USAID nurses and a highly intelligent Vietnamese nurse helped Dr. Dickstein in an often-lost battle of death due to overwhelming tracheobronchial infections, pneumonias, plague, severe tuberculous pneumonias, scrofula and tetanus. When I arrived he was fighting an epidemic of hepatitis.

The third member, Capt. Lottie Varano, having spent considerable time in the province, was a great help to me with the language, protocol and routines of military wards where I worked primarily during my tour.

Principal Duties

At first my work was mainly with the RFPF cadre and badly wounded ARVIN, then later with the women and children. The wounded were brought in from the operations areas and I made daily rounds in the wards treating mostly fractures, abdominal wounds resulting in colostomies, bowel and chest wounds and disfigurement. I saw no napalm burns. There was a variety of medical cases, some fevers of unknown origin, possibly dengue, but no true malaria as I had seen in the Philippines in World War II. There was considerable TB, some severe pneumonias, malnutrition and occasional leprosy. I also fell heir to the care of VC prisoners with a variety of chest infections and broken limbs. Many of the patients on regular wards probably were VC and we treated them with the same care and compassion as all others. My large outpatient turnover was not unfamiliar or difficult because of my experience in industrial medicine. The myriad of psychoneuroses interested me, particularly the hyperventilation syndrome with alkalosis. The Vietnamese nurses and aides were impressed by this type patient and equally disturbed when we were not overly concerned. My chief nurse, a male, was very familiar with the ills of his patients and often presented a problem, feeling that I should not order certain medications or x-rays. After being firm with him, he became most cooperative.

My ward chief, a handsome and cheerful Vietnamese named Kiet, was my good right hand who tried his utmost to carry out every order. Knowing that I wanted the wounds exposed to the air as much as possible, he even tried to keep the fly rate down with sticky fly paper—managing only to catch salamanders. His response and diligence was highly commendable and if trained at U. S. standards would make an excellent practical nurse.

On several occasions I replaced the Air Force surgeon, Capt. MacDougal, treating fractures of all extremities, intestinal wounds, shrapnel and

(Continued on page 45)



Dr. DeVito on postoperative ward at Phu Vinh hospital.



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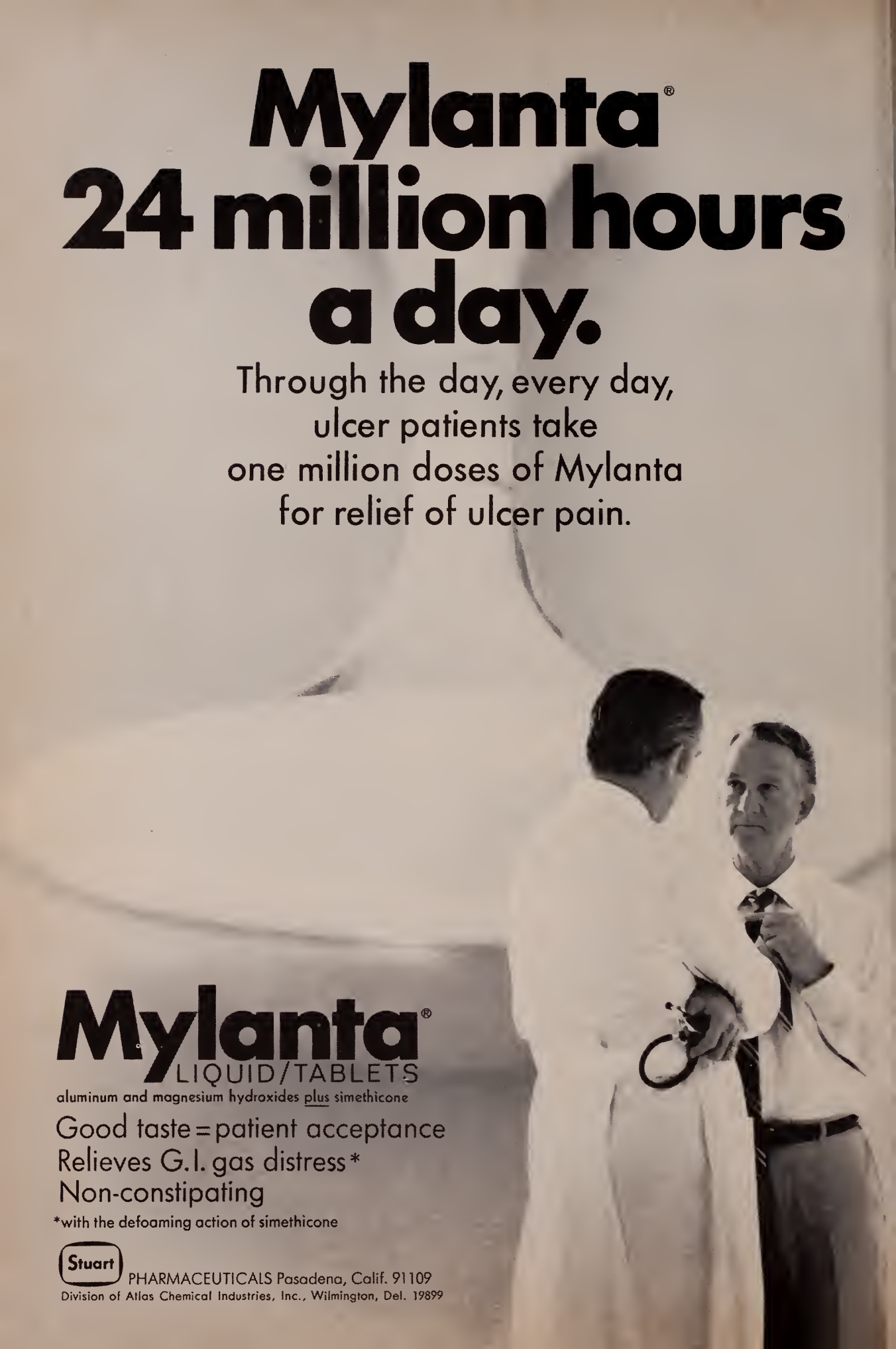
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bladder injuries, chest penetrations with pneumothorax; in fact, wounds of practically every part of the anatomy. We had some casualties allegedly resulting from B-52 bombings with shell fragments of the cranium and spine. When Capt. MacDougal left on rotation, I was called upon to do many of the major procedures in addition to some elective surgery, a refreshing change from the depressing repair of war wounds. I worked considerably with mortar wounds and many civilians wounded by land mines, grenade traps, foot mines and other devilish contraptions contrived by the VC.

The operating suite team, excellent by Vietnamese standards, were accustomed to working together in disaster situations. They immediately started Ringers solution with a large needle, gave antitetanus serum and began antibiotic therapy, cleansing and preparing each patient rapidly for surgery, thus facilitating the faster movement of patients and fuller utilization of the operating suite. Lack of blood was our greatest problem. My frustration and anger resulted occasionally in obtaining several units that I might not have gotten otherwise. At one time we had several serious casualties and were able to obtain 11 units with all the hospital staff and MILPHAP team helping. This was a red letter day; that much blood had never been given at one time in the history of the hospital.

Rarely were we called back in the evening for treatment of civilians but on one or two instances we had as many as ten to 15 casualties. The evenings were pretty much our own but we did not venture too far from our billets and only then with permission of the PSA and security people. The MACV family were most helpful along these lines and had plenty of chess and card games going.

The medical aide men, Sgts. Peter Forsell and John Primak, USAF, who assisted me mostly in surgery were pleasant, capable young men. I cannot praise too highly the USAID nurses for their devotion. Their feeling for nursing made me nostalgic for the good old days when nurses took care of sick people for the joy of nursing.

The highlight of my trip was a MEDCAP operation about 40 to 50 kilometers from Phu Vinh. With security people checking the roads and area en route, three nurses and I traveled to the hamlets in what we learned was the first MEDCAP operation ever made in Vinh Binh province. It was a privilege to communicate with the people about the purposes and assistance they could receive through USAID and then to examine and administer to their medical needs with whatever supplies and medications we had on hand. The impact of this type operation was outstanding and we felt a wonderful exhilaration knowing that we had brought hope and medical care to the people where they live, work and rear their children. In my opinion this program and the wonderful teams working with it hold the answer to eventual peace in this war-torn land.

The remainder of my tour at the Phu Vinh hospital continued with work in surgery, in the surgical wards and when time permitted assisting MILPHAP doctors with medical problems.

My return trip was processed smoothly by Dr. Wilson and Mr. Miller, who is an expert on travel arrangements, customs and visas, an invaluable aid to the program by virtue of his knowledge and understanding of the city and the people of South Vietnam. Dr. Wilson is equally well suited for the job of director.

Suggestions

There is no question of the need of the VPVN program in helping the MILPHAP teams and Vietnamese personnel in the hospitals. The volunteer physician makes a tremendous impact on the civilian population by virtue of the fact that he has left home and family to administer to the needs of the Vietnamese people.

In an effort to help the VPVN program, I should like to make these suggestions.

1. More publicity should be given to the program in the lay press, such as Project Hope is getting throughout the country and world.

2. Whenever possible allow the ARVIN physicians to care for Vietnamese cadre in military wards, thus enabling the VPVN to work more with women, children and other civilian victims.

3. The need for blood could be easily overcome with local cadremen and ARVIN soldiers establishing and sustaining a blood bank for their own people. There can be some method of preservation of blood or at least keeping a donor list of cadremen and soldiers.

4. The amputees should be sent, as much as possible, to the Cantho or Saigon rehabilitation centers to learn how to make prostheses. With USAID help, lathes and equipment could be supplied at the provincial hospital and these men, women and children could be working in shops making their own prostheses.

5. A physiotherapy department could be established in the provincial hospitals, initially staffed by USAID physiotherapists, working with Vietnamese counterparts on the numerous fracture amputees, bone and joint disorders. Simple therapy, passive exercises and even whirlpool therapy, instituted at local hospital level would eliminate sending patients by air to Saigon or Cantho.

6. Efforts should be continued to institute better methods of cleanliness and good sterile techniques in the provincial hospitals. Much had been done in Phu Vinh hospital but the basic elements of cleanliness and hygiene are still badly needed.

7. Inservice training by USAID nurses, MILPHAP administrators and personnel should be continued and increased so that local nurses' aides, ward boys and orderly personnel may learn more effectively to follow standard medical practices which we are hoping to indoctrinate in provincial hospitals.

The most important physician-type in this program is the general practitioner-surgeon. Second is the pediatrician. Children are the sickest patients in the hospitals and their number and diseases are appalling. The general surgeon is of great importance also and if he does some general practice he is invaluable during quieter periods. After the general surgeon I would place the ophthalmologist as eye injuries and diseases are myriad.

Finally after visiting the beautiful University of Saigon Medical School I thought how much could be done to coordinate and improve the graduates' hospital training. They could be sent for a period to provincial hospitals where a wealth of clinical experience and top level teaching is available. MILPHAP doctors, the medicine chief and VPVN's could provide unlimited background to further the medical maturity of these fledgling doctors.

Conclusion

In summary, my experience in this program has been one of the high points of my entire life. I certainly learned much and feel that the Vietnamese people, particularly the trained people, have contributed a certain type of training and experience to round out my own medical career. In some small measure, I may have helped these courageous people fight the battle for peace on the home front, at least in the promotion of good health and corrective medicine for the future.

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Comments on Recommendations of Task Force on Medicaid and Related Programs

The Task Force on Medicaid and Related Programs has received factual reports of health care problems and debated alternative solutions sufficient to make the existence of a major "Crisis in Health Care" abundantly evident. Successful resolution will require thoughtful dedication of all health resources, both public and private.

I concur with recommendations to: (1) create an Undersecretary for Health with line authority over all health care activities of the Department of Health, Education and Welfare, (2) replace Medicaid with an insurance program supported by general revenue tax as needed, and (3) increase efficiency and economy in providing and using institutional care which accounts for over two-thirds of the $64 billion personal health care expenditures this fiscal year.

However, I do not concur in the recommendation to combine Sections A and B of Title XVIII which would combine financing of professional medical services with the costs of institutional care in the Medicare program; and the recommendation requiring assignment as the only method for Medicare payment. Also, I do not believe implementing professional utilization review by government employed teams would accomplish the objectives of quality and economy in health care delivery.

On the contrary, these three recommendations would create a social security tax-supported government administered medical care system which would be a tragedy for both the patient and taxpayer and would not resolve present health care problems.

I support alternative recommendations more likely to achieve immediate and long range improvement in health care delivery, directed to stimulating the private medical sector in the development of methods for effective peer utilization review and quality control of health care. A well organized medical care information system for peer utilization review in the private sector would provide a means for efficient management of public and private health insurance financing and a guide to facilitate the evolutionary adaptation of medical care delivery responsive to community needs.

H. Phillip Hampton, M.D.
Task Force Member
Tampa



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To find that all the sages said
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—John Greenleaf Whittier

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Indications: Essential hypertension. Use cautiously in patients with renal insufficiency, particularly if they are digitalized.
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Warnings: Small-bowel lesions (obstruction, hemorrhage, perforation and death) have occurred during therapy with enteric-coated formulations containing potassium, with or without thiazides. Such potassium formulations should be used with Salutensin only when indicated and should be discontinued immediately if abdominal pain, distension, nausea, vomiting or gastrointestinal bleeding occurs. Use cautiously, and only when deemed essential, in fertile, pregnant or lactating patients. *Use in Pregnancy:* Thiazides cross the placenta and can cause fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly electrolyte disturbances. Fatal reactions may occur with reserpine during electroshock therapy; discontinue Salutensin 2 weeks before such therapy. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Azotemia, hypochloremia, hyponatremia, hypochloremic alkalosis and hypokaliemia (especially with hepatic cirrhosis and corticosteroid therapy) may occur, particularly with pre-existing vomiting and diarrhea. Potassium loss or protoveratrine A may cause digitalis intoxication. *Potassium loss responds to potassium-rich foods, potassium chloride or, if necessary, discontinuation of therapy. Stop therapy if protoveratrine A induces digitalis intoxication.* Serum ammonia elevation may precipitate coma in precomatose hepatic cirrhotics. Discontinue therapy 2 weeks before surgery or if myocardial irritability, progressive azotemia or severe depression occur. Exercise caution in patients with chronic uremia, angina pectoris, coronary thrombosis or extensive cerebral vascular disease *or bronchial asthma* and in those with a history of peptic ulceration or bronchial asthma; in post-sympathectomy patients; in patients on quinidine; and in patients with gallstones, in whom biliary colic may occur. Patients who have diabetes mellitus or who are suspected of being prediabetic should be kept under close observation if treated with this agent.
Adverse Reactions: Hydroflumethiazide: Skin rashes (including exfoliative dermatitis), skin photosensitivity, urticaria, necrotizing angiitis, xanthopsia, granulocytopenia, aplastic anemia, orthostatic hypotension (potentiated with alcohol, barbiturates or narcotics), allergic glomerulonephritis, acute pancreatitis, liver involvement (intrahepatic cholestatic jaundice), purpura plus or minus thrombocytopenia, hyperuricemia, hyperglycemia, glycosuria, malaise, weakness, dizziness, fatigue, paresthesias, muscle cramps, skin rash, epigastric distress, vomiting, diarrhea and constipation. *Reserpine:* Depression, peptic ulceration, diarrhea, Parkinsonism, nasal stuffiness, dryness of the mouth, weight gain, impotence or decreased libido, conjunctival injection, dull sensorium, deafness, glaucoma, uveitis, optic atrophy, and, with overdosage, agitation, insomnia and nightmares. *Protoveratrine A:* Nausea, vomiting, cardiac arrhythmia, prostration, blurring vision, mental confusion, excessive hypotension and bradycardia. (Treat bradycardia with atropine and hypotension with vasopressors.)
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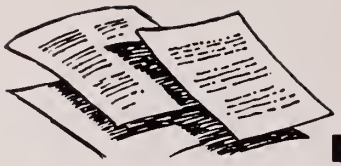
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Letters

Dear Editor:

I was dismayed to read in the July issue of the Journal that the House of Delegates had approved, without a dissenting voice, Resolution 70-32, condemning the government of North Viet Nam for its treatment of prisoners of war. This, with the final resolution of the House unanimously approving the present administrations policy in South East Asia, is a belated medical "Gulf of Tonkin" type action which hasn't even the rationalization of learning from history; to avoid repeating mistakes! To add to the embarrassment of such support for the war in South East Asia there is today's news of the treatment of prisoners by the South Viet government, which though known to be brutal, cruel and inhuman by the U. S. officials in Saigon for years, was even attempted to be suppressed by almost all members of a congressional committee —in order to do what? Sanctify the present and all past regimes of South Viet Nam? Because of our parentage? Or because without such sponsorship they would never have come into being, or been quickly removed if somehow they had gained ascendancy?

Perhaps an old principle of justice should have been blazoned to our House of Delegates, pertinently, "To seek equity, one must enter with equity!" The first part of the Resolution 70-32 states "That since North Viet Nam has failed to meet her agreement to the Geneva convention in regard to these prisoners . . ." With that statement let us refer to the Geneva which should bind, namely, the Geneva Conference of 1954, consisting of nine governments, of which the U. S. was a part.

There were two agreements—the final Geneva Accords, and the Geneva Armistice Agreement for the Cessation of Hostilities. This latter was essentially a military truce between Ho Chi Minh's government and the French military command. The puppet Bao Dai government, and all succeeding South Viet Namese governments have been of the same political test tube, now of American manufacture, acted as the powerless agent of the French military administration. The military demarcation line was accepted by Ho Chi Minh's government as provisional and not a political or territorial boundary. This was reluctantly accepted though Ho Chi Minh's government controlled three-quarters of Viet Nam and the boundary line gave it less than half of the territory. This temporary loss was also accepted because of the promise that within two years national elections would be held to unify the country.

In less than a year after the Geneva Conference France pulled out without honoring its obligations concerning the elections, alleging U. S. pressure.

The U. S. had not been a party to the military truce. Obviously it was not in the war. Neither had it assented to the Geneva declaration. But even before French withdrawal it had begun to support Bao Dai and then Prime Minister Ngo Dinh Diem, appointed two weeks before the Geneva Conference concluded. With Diem's failure to stifle the aspirations of the South Viet Namese, his demise was inevitable—and C.I.A. embalming more than suspected. The coup d'etat of General Nguyen Khanh, and the present Thieu-Ky regime can only exist by U. S. military aid—which germinated from a limited, qualified pledge of economic support by President Eisenhower.

Then, Florida Medical Association, in view of this brief history of our military involvement, now in Cambodia and Laos as well, who has done what to whom? Who has been napalmed, bombed, defoliated? Whose families decimated? Who shot at if they run and do not stand still? Whose inhumanity is being criticized?

Do we "Cry Shame!" as doctors—against the crimes of our own country? Or shall we parade patriotism as a cover for humanism?

HARRY E. BELLER, M.D.
MIAMI

Dear Editor:

The covers of the Florida Medical Association Journal have been most unusual.

I am very regretful that I have not saved them during the year because I would like very much to create a display in my office of these truly outstanding artistic covers.

If it would be possible to obtain some of them for this purpose I would be most grateful. This sort of a display might also be a good idea for one of the offices of the medical association.

HENRY G. RING, M.D.
MIAMI

Dear Editor:

I just read the August edition of the Journal and have to tell you it is great.

I have long been interested in medical history and thoroughly enjoyed this great edition.

Would it be possible to obtain copies of the previous issues dealing with history? If so, I would like to have them.

WALTER E. CAMPBELL, M.D.
FORT LAUDERDALE

If language is not correct.

Then what is said is not what is meant;

If what is said is not what is meant,

Then what ought to be done remains undone.

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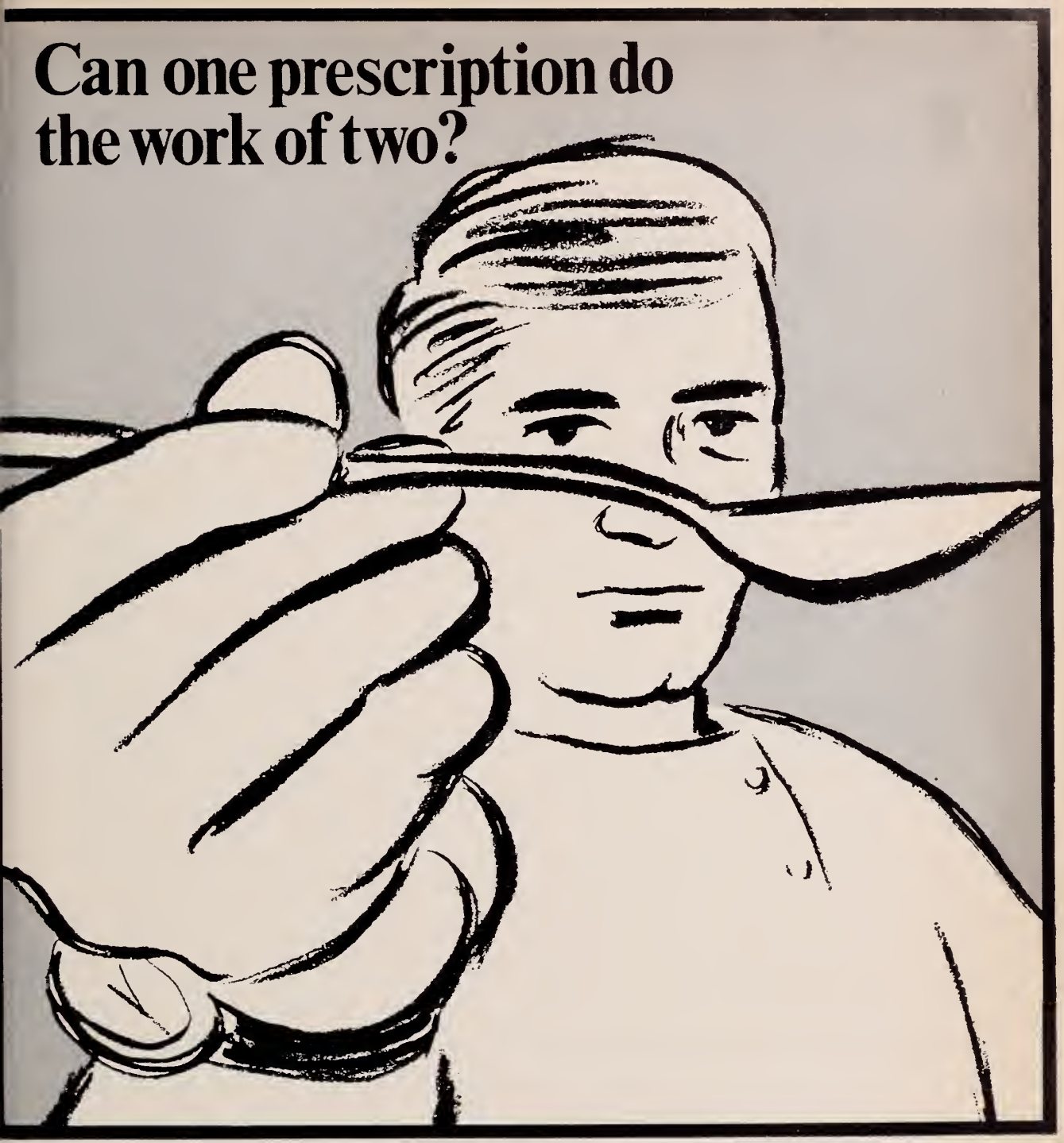
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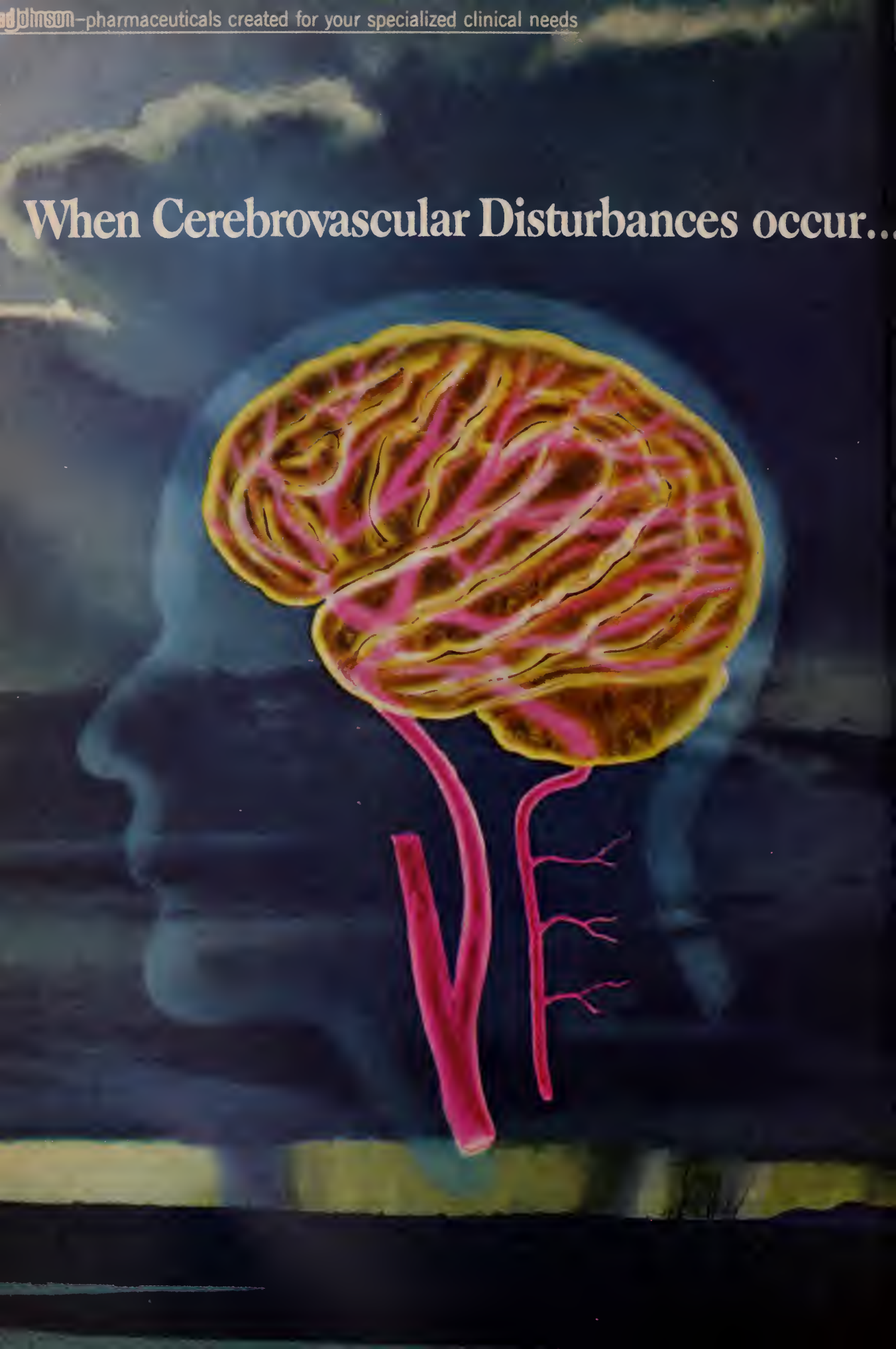
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Indian River County Medical Society Honors Dr. E. B. Hardee Sr.



Dr. Hardee of Vero Beach has retired after actively practicing general medicine in Indian River County for 44 years. Many Florida physicians granted their state licenses during the period 1952-1968 will remember Dr. Hardee as a member of the Board of Medical Examiners. He served as president in 1956. Those attending annual meetings of the Florida Medical Association will recall the warmth of his personality and the graciousness of his remarks in the House of Delegates sessions. He was Vice President of the Association in 1945.

The dinner meeting of the Indian River County Medical Society on June 26 in Vero Beach offered an opportunity for Dr. Hardee's colleagues, relatives and friends to reminisce about their experiences which had involved him. Former Senator Merrill P. Barber, also a patient, recalled that in the early days of Dr. Hardee's practice he had to be a specialist in all fields, and Dr. J. C. Robertson of Vero Beach added his recollections as a friend who had practiced medicine with Dr. Hardee for many years. Dr. David Tingle, president of the society, introduced the visitors and presented Dr. James F. Cooney of West Palm Beach who represented the Florida Medical Association.

Dr. Hardee could not attend the dinner due to an illness which has confined him to his home, 814 Royal Palm Place in Vero Beach. Mrs. Hardee and his younger son, Wellford, received the plaque of appreciation from the society which he served as president in 1956. The other son, Dr. E. B. Hardee Jr., a member of the society and Florida Medical Association, is in Germany serving as a lieutenant colonel in the Army Medical Corps.

A portrait of Dr. Hardee was presented to Robert Jackson, chairman of the Indian River Memorial Hospital board of directors, and Robert Meadows, administrator, for display in the hospital's lobby. Dr. Hardee is a former chief of staff.

In addition to duties with the State Board of Medical Examiners, Dr. Hardee served as a member of the executive committee of the National Board of Medical Examiners from 1957 to 1960 and as a member of the Federation of State Boards of Medical Examiners from 1952 to 1960. He is a Fellow of the American Geriatrics Society and a past president of the Florida East Coast Medical Association. His professional, civic and religious interests extend into many other organizations.

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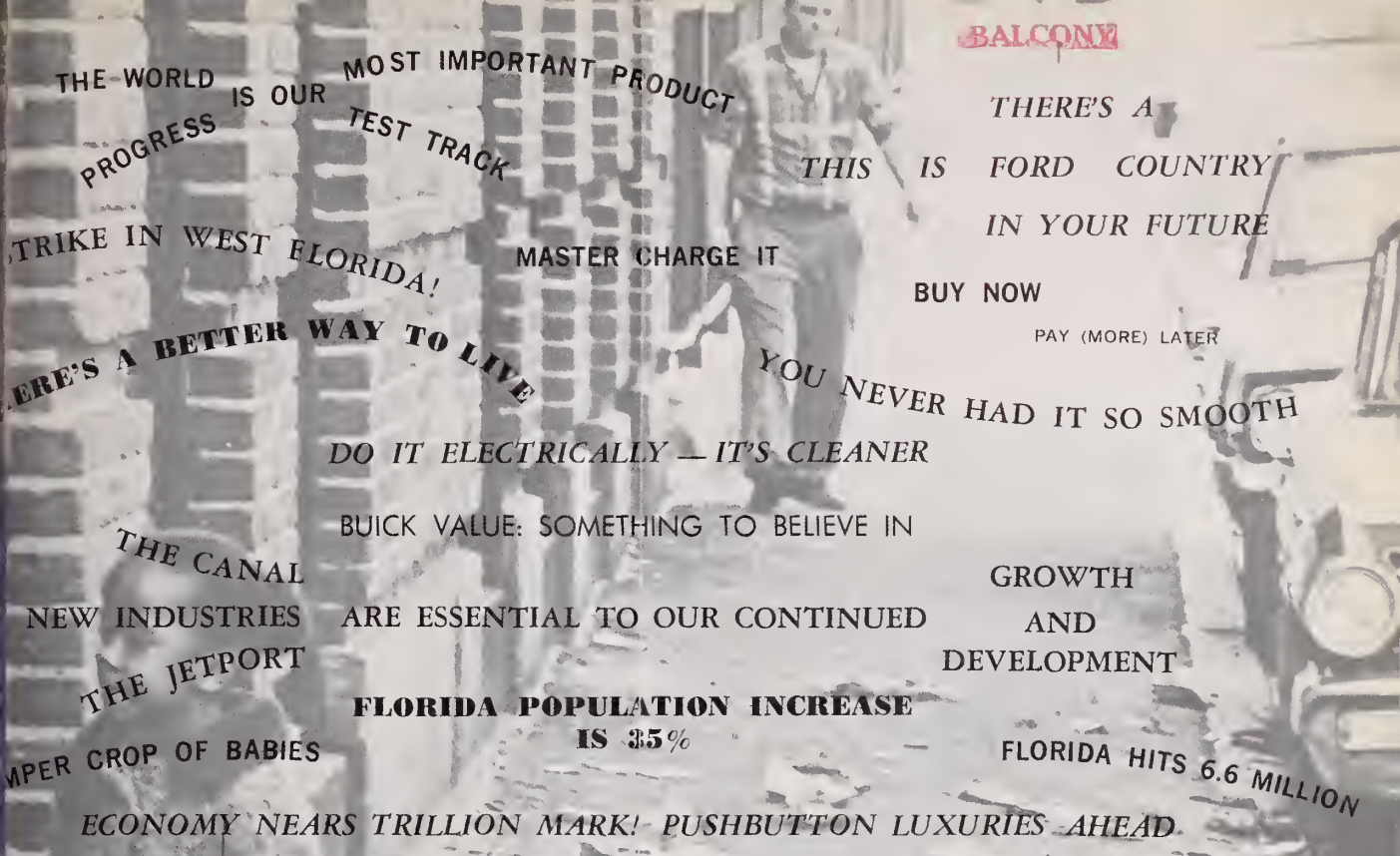
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Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive

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measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy



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OCTOBER COVER: Can the FMA interpose itself between the philosophy expressed on the cover and herein and what many believe will be its natural outcome? Photograph by Major Morris, Lincoln Filene Center, Tufts University, Medford, Mass.





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The actions of the official Tincture and Extract of Belladonna result chiefly from their Atropine content . . . conclude Goodman and Gilman

THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
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In clinical trials, depending on the dosage form and strength used, complete involution occurred in 77 to 88 per cent of lesions following treatment. The rate of recurrence was low, ranging from 1.7 to 5.6 per cent up to a year after completion of therapy. When lesions did recur or new ones appeared, repeated courses of Efudex therapy proved effective.*

1/22/68—Treatment with 5% 5-FU cream commences. Patient K.L. showing widespread but mild solar keratoses (also known as actinic keratoses).



:/68—After 11 days of treatment. 'thema is seen at site of keratoses. In lition, numerous lesions not apparent or to therapy have become manifest sharply defined reactions. Intervening n, also treated, shows no response to rapy.

19/69—One year after cessation of rapy. Skin appears clear with no evi- ıce of scarring. Examination reveals k of recurrence or the formation of w lesions.



Predictable sequence of therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of the keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two to three months before gradually receding.

Selective—with a high degree of safety

Despite the temporary unsightliness and discomfort of the inflammatory episode, Efudex is, in general, more readily tolerated than surgery. Clinical work shows the intense inflammatory response to be limited to the area of the lesion. Normal skin is not similarly affected. Another measure of Efudex safety: systemic absorption of topical fluorouracil was insignificant, indicating a low risk of systemic toxicity.*

Two strengths—two convenient dosage forms

Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, there are two important considerations. First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

2% and 5% Solutions; 5% Cream Applied twice daily—resolves solar or actinic keratoses.

new Efudex® (fluorouracil) cream/solution



For full prescribing information, please see the following page.

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(fluorouracil) cream/solution the new standardized topical for solar/actinic keratoses

Description: Efudex solutions and cream are topical preparations containing the fluorinated pyrimidine 5-fluorouracil, an antineoplastic antimetabolite.

Efudex Solution consists of 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris-(hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream contains 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

Actions: There is evidence that the metabolism of fluorouracil in the anabolic pathway blocks the methylation reaction of deoxyuridylic acid to thymidylic acid. In this fashion fluorouracil interferes with the synthesis of deoxyribonucleic acid (DNA) and to a lesser extent inhibits the formation of ribonucleic acid (RNA). Since DNA and RNA are essential for cell division and growth, the effect of fluorouracil may be to create a thymine deficiency which provokes unbalanced growth and death of the cell. The effects of DNA and RNA deprivation are most marked on those cells which grow more rapidly and which take up fluorouracil at a more rapid pace. The catabolic metabolism of fluorouracil results in degradative products (*e.g.*, CO_2, urea, α-fluoro-β-alanine) which are inactive.

Studies in man with topical application of ^{14}C-labeled Efudex demonstrated insignificant absorption as measured by ^{14}C content of plasma, urine and respiratory CO_2.

Indications: Efudex is recommended for the topical treatment of multiple actinic or solar keratoses.

Contraindications: Efudex is contraindicated in patients with known hypersensitivity to any of its components.

Warnings: If an occlusive dressing is used, there may be an increase in the incidence of inflammatory reactions in the adjacent normal skin.

Prolonged exposure to ultraviolet rays should be avoided while under treatment with Efudex because the intensity of the reaction may be increased.

Usage in Pregnancy: Safety for use in pregnancy has not been established.

Precautions: If Efudex is applied with the fingers, the hands should be washed immediately afterward. Efudex should be applied with care near the eyes, nose and mouth. To rule out the presence of a frank neoplasm, a biopsy should be made of those areas failing to respond to treatment or recurring after treatment.

Adverse Reactions: The most frequently encountered local reactions were pain, pruritus, hyperpigmentation and burnin the site of application. Other local reactions included dermat scarring, soreness and tenderness.

Also reported were insomnia, stomatitis, suppuration, scal swelling, irritability, medicinal taste, photosensitivity and lacrimation.

Laboratory abnormalities reported were leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Efudex should be applied twice with a nonmetal applicator or suitable glove in an amount of solution or cream sufficient to cover the lesion. When Efudex applied to a lesion, a response occurs with the following sequ erythema, usually followed by vesiculation, erosion, ulceratic necrosis and epithelization. The lower frequency and intensit activity in adjacent normal skin indicate a selective cytotoxic property. Medication should be continued until the inflammat reaction reaches the erosion, necrosis and ulceration stage, a which time use of the drug should be terminated. The usual duration of therapy is from 2 to 4 weeks. Complete healing of t lesion may not be evident for 1 to 2 months following cessatior Efudex therapy.

How Supplied: Efudex Solution, 10-ml drop dispensers—contai 2% or 5% fluorouracil on a weight/weight basis, compounde with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil ir vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (meth and propyl).

Clinical Studies: The effectiveness of the three preparations a determined by complete involution of solar keratoses was: 2% Solution, 77% of 282 lesions; 5% Solution, 88% of 202 lesions; and 5% Cream, 85% of 189 lesions. In those lesions wh complete involution followed treatment, the rate of possible recurrences observed clinically at periods up to 12 months or m was: 2% Solution, 4.6% of 218 lesions; 5% Solution, 1.7% of 1 lesions; and 5% Cream, 5.6% of 160 lesions. Because of the toxi potential of fluorouracil, some physicians preferred to use the 2 solution when large areas were to be treated. Approximately 30 of the lesions required treatment for two weeks or less; approximately 78% required four weeks or less for adequate treatment.

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President's Page



We Are Still Trying

Although it is a minor portion of most of our income, I believe one of the most irritating and unjust situations Florida medicine has had to face has been the Workmen's Compensation Fee Schedule. Undoubtedly, most of the fees allowed are inadequate for the services rendered at present day standards.

I have found many doctors feel that the FMA has been ignoring the problem, or at best, making feeble and futile attempts at a solution. This is not true. No one subject has had more attention over the past few years by the Board of Governors. No one subject has been more frustrating. No one subject has concentrated more effort by the involved committees. I really believe we could have worked no harder.

We are badly handicapped by the law, which as a corporation we must obey; both the laws governing the fee schedule, and the state and federal antitrust laws. The Florida Medical Association must always work within the law, however this might hamper our efforts.

We have been promised a review of the fee schedule. How many fees, concerning how many services will they review? Merely reviewing a segment of the fees—say those of the neurosurgeons —will not alleviate the situation; indeed, it might make it worse. If the neurosurgeons obtain relief, and the orthopedic surgeons do not, I'm sure overall dissatisfaction will be more rampant than before.

As have my predecessors, I have no more fervent wish than to get this problem solved. The Board of Governors, Joe Matthew's committee, and our attorneys, are all quite active on the subject. We have formidable antagonists. We can try no harder. Perhaps this year, through all our efforts, some sort of justice will prevail. In the meantime, I urge you not to become impatient with those who are devoting their best efforts in your behalf.

James T. Cobb, Jr., M.D.

Menrium® treats the menopausal symptoms that bother him most.



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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of manifestations generally associated with the menopausal syndrome—anxiety and tension, vasomotor complaints and hormonal deficiency states.

Contraindications: Women with cancer of breast or genitalia, except inoperable cases, and those with known hypersensitivity to chlordiazepoxide and/or esterified estrogens.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Exclude other possible causes of menopausal syndrome manifestations, such as pregnancy. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) similar to those seen with barbiturates have been reported following discontinuance of chlordiazepoxide HCl. Potential benefits of use in pregnancy, lactation or women of childbearing age should be weighed against possible hazards to mother and child. Clinical data inadequate on safety in pregnancy.

Precautions: In elderly and debilitated patients, limit dosage to smallest effective amount of chlordiazepoxide (initially 10 mg or less per day) to preclude ataxia or oversedation; increase gradually as needed and tolerated. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects—particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in patients with impaired renal or hepatic function. Paradoxical reactions to chlordiazepoxide (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in the treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation very rarely reported in patients receiving Librium® (chlordiazepoxide) and oral anticoagulants.

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With estrogens, headache, nausea and vomiting, anorexia, gastrointestinal discomfort, dysuria and urinary frequency, jitteriness, breast engorgement, formation of breast cysts, skin rashes and pruritus occasionally seen. Administration may also be associated with uterine bleeding and/or followed by withdrawal bleeding.

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THE JOURNAL OF THE Florida Medical Association

OCTOBER, 1970 • VOLUME 57 • NUMBER 10

The State of the Health of Our Environment

ROBERT B. RAGLAND, M.D.

EDITOR'S NOTE: The ecotactics of how living organisms and the nonliving environment fail to function together as a system and thus may produce an ecocatastrophe are described herein by a select group of outstanding ecologists. Among a species so intelligent and so skillful that we can travel to the moon, synthesize a gene, transplant a human heart, we yet are incapable of preventing the production of pollutants that could destroy all of us. Available is the knowledge and resources required to solve these problems. All we need is a global world to do so and the international courage to redirect our resources. We are indebted to Dr. Ragland and his contemporary environmentalists for leading the way.

The idea for this issue of the Journal was precipitated in December 1969 by Dr. Henry J. Babers' President's Page message in the November issue asking members to "Speak Up." Dr. Franz Stewart, then Editor of the Journal, gave his enthusiastic approval to the project.

The reasons for this issue are many. There is an environmental crisis; physicians are a potential source of leadership in the conservation movement because of their educational background; health care for the individual is inseparable from the environment in which he exists. An outpouring of information about the environment began in the mass media early this year; however, it has been feared that the interest would not be sustained. There appears to have been more talk than action. As I write, we still lack understanding Indians and Chiefs and little has been heard from members of the medical profession.

In this issue are discussed the importance of environment to man and his place in it, how it all works, forces presently impinging upon it, especially those influenced by man, and evidence of and reasons for malfunction. The planet's biological aspects cannot be understood apart from social, economic, political, legal and other factors which we discuss and interrelate. Perhaps, as authors, we have not hit the high mark aimed at, but we hope this issue will stimulate thought, leadership and action in the medical profession, as individuals and as a group, and that more papers on these subjects will be forthcoming. Without knowledge and discussion there is not apt to be meaningful action.

Bear in mind that those who are active in the environmental movement are neither soothsayers nor prophets. Rather they are catalysts who will doubtless produce anxiety because they do not bring comfortable news. And certainly the contents of this issue are open to revision.

▶ Dr. Ragland, 2783 Oak Street, Jacksonville 32205.

Man Looks at His Environment

George Cornwell, Ph.D.

We entered this decade of the 70's with an overriding national concern for the quality of our environment and the future of "Spaceship Earth." For the first time in our history, we recognized the possibility that our species might be rendered extinct by its degradation of the human environment. Richard Nixon launched the decade with a directive: "The 1970's must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters, and our living environment. It is literally now or never." In the past 18 months, we have been groping through a forest of environmental rhetoric seeking a pathway toward environmental action. Definition of the problem remains a major obstacle, since we see the environment through hopelessly biased optics. How should we look at our environment?

Ecosystem Concept

Ecologists have been referred to as the White Knights of the 70's. Aside from any racial implications, this is a highly elevated status for such obscure scientific peons of the past. A favorite definition of ecology is: "The study of how living organisms and the non-living environment function together as a system." Ecologists, thus, are grossly scientific generalists, attempting to function in a society that advances through specialization. We still hear often two, old-time definitions of ecology: (1) The study of the incomprehensible by the incompetent, (2) The elaboration of the obvious. Ecology has also become a social-political rallying point, a holistic overview of man and his environment adopted by millions. We must think ecologically if we hope to understand the complexities of the environmental crisis.

The first step in ecological thought is to recognize man as one of 193 living species of monkeys and apes. Morris has been of major assistance by writing "The Naked Ape." Most physicians agree to the animalistic nature of man without argument, but a majority of our population probably regards man as Wylie does in "The Magic Animal," something quite apart from the rest of nature. Such other authors as Rene Dubos, Robert Ardrey, and Konrad Lorenze help us to overcome our egocentric conceptions and to visualize man as a member of the community of beasts.

The ecosystem concept helps sharpen one's perspective of the environment. Lugo offers an ecological engineer's definition of the ecosystem: "An ecosystem represents a group of compartments (living and non-living) through which materials and energy flow according to the laws of physics. Compartments of the ecosystem incorporate producers, consumers, and reducers, all connected by pathways through which energy and resources flow and recycle through ingenious feedbacks that permit nearly perpetual operation." John Muir, a founding father of conservation, understood the ecosystem two generations ago when he said: "When we try to pick out anything by itself, we find it hitched to everything in the universe."

Basic Ecological Principles

"That everything is connected to everything else" must be regarded as the First Law of Ecology. If we look in nature at a community to determine who eats whom in an attempt to trace this so-called "food chain" by interconnecting lines, we soon encounter such a maze of lines that we realize we have traced, in truth, a "food web." This "web of life" is the basis for concern over the threatened extinction of many birds of prey by the sublethal effects of chlorinated hydrocarbon pesticides. It also explains our unrest over the inability of the ocean's phytoplankton to produce oxygen through photosynthesis when placed in water with minute amounts of these same pesticides. A pictogram of man and his environment would bear the label "The Human Ecosystem."

The Second Law of Ecology might be termed the "limitation of all life by carrying capacity." Each species, through evolutionary processes, is adapted to a specific habitat. This habitat is a finite resource with limits on the maximum num-

Dr. Cornwell is Associate Professor of Wildlife Ecology, School of Forestry, University of Florida, Gainesville.

ber of a species that it can maintain over a "infinite span of time." This limitation is termed the carrying capacity, and it can be approximately determined through research for any living animal species. We have yet to do this for man, but the research is underway under the auspices of the United Nations. The carrying capacity for man is a fluid quantity influenced by technological innovations that expand habitat, by socioeconomic forces that can reduce or expand populations, and by quality judgments that determine how far beyond biological minimums man should extend his consumption of resources to assure a meaningful existence.

The Third Law of Ecology is "the need for diversity." The student of ecology is immensely impressed by the complexity of the ecosystem. The millions of species of biota interact with the great variability in physical environments to form a system so diverse and complex that it defies the techniques of systems analysis. The stability of the natural system depends on this tremendous diversity. Perhaps the health of man is also contingent upon the degree of diversity in the human experience? In man's efforts to manipulate parts of the ecosystem, he continually moves toward simplifying the system, as evidenced both by agricultural and urban development. As we destroy the natural diversity, we inherit instability and subsequent management problems that often are more than we can handle. In a most significant book, Dasmann makes a plea for diversity: ". . . for the preservation of natural diversity and for the creation of man-made diversity in the hope that the prevailing trend toward unformity can be arrested and the world kept a fit place for the greatest possible human variety."

Harding: Redefine Progress

The solutions to our environmental ills depend on correctly perceiving the environmental problems. Our clear perception requires understanding the basic ecological principles that define the functioning of our ecosystem. With an ecological viewpoint, we can move forward in collective action directed toward maintaining a functional environment capable of sustaining our species.

I suggest we redefine the conventional meaning of progress to be: *those acts of man that enhance the quality of the human experience without impairing the earth's life-support systems.* We must insist on an ecological input in the planning of all programs and projects. For example, how ecologically wise is it for man to lower his death rates without concomitantly depressing birth rates? A major factor in the environmental crisis has been medical technology's success in achieving the one while practically ignoring the other. We must evaluate each human action in terms of its cost in energy, resources consumed, and environmental degradation. When the environmental price tag is too high, the action must be abandoned. As President Nixon has warned us, we must be prepared to pay a heavy price for our past abuses and mistakes. We must gird ourselves for abandonment of many of the basic precepts of private enterprise, such as the right of the owner to do with his lands as he wishes, without regard to the effects of his action on the health of the ecosystem. We must identify environmental abuse as antisocial behavior, even when profitable. We must be prepared to lower our own individual consumption of resources and the affluence that this consumption makes possible. We must, as responsible citizens, be prepared to do all that is necessary to restore the environment to at least a functional level of health.

Conclusion

I am sure all of us who are nearly 40, or older, can recall the dramatic sacrifices we made as a people to emerge "victorious" from the stresses of World War II. A similar enthusiastic and total commitment as a world community of men will be necessary if we are to avoid being the victims of our gluttony.

There even may be a bright aspect to failure. Ecocatastrophe is the word used for the "dooms day" type of event which many environmentalists forecast. If a major, world ecocatastrophe does occur, it is highly probable that some humans would survive, even in a drastically altered environment. These surviving hominoids would provide a gene pool that could lead to the evolution of a "superior" species in terms of its relationship with nature. From this, we may regard ourselves as a mere evolutionary stage like many another animal species who has rendered its environment unsuitable for itself but ideal for a newly-evolved species.

As a pragmatic, problem-solving species, let's employ our meager talents in a search for a more harmonious relationship to our ecosystem. This is the surest prophylactic for ecocatastrophe.

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Unwanted Chemicals in Man and Environment

Maurice W. Provost, Ph.D.

Whatever the semantics, with civilization *Homo sapiens* initiated his changing of the face of the earth. Uncivilized protoman was an integral part of a biosphere which his instincts told him was his habitat and which his dawning intelligence told him was not to be destroyed. Civilization soon brought this pristine condition to an end, and as it advanced on its inexorable logarithmic path toward today's technology, so did the despoliation of what is now so concernedly and belatedly referred to as man's environment: the earth's biosphere. Laments, griefs and frustrations notwithstanding, our problem is not to cast a long lingering glance behind but to stake out where we are today and take off from there toward a reconciliation with the biosphere we have violated. Unwanted chemicals are only part of the picture but are nevertheless so numerous, new ones being pumped into the environment at the rate of 5000 per year,[1] that only books[2-4] can do the subject justice so I intend here to select only a few glaring examples, first describing them as problems and later commenting on hopeful advances toward solutions.

Restoring the viability of our environment must be predicated on the answers to two questions: (1) How will our population grow? (2) Where will our technology go? Our discussions will be idle without answers to these questions. The natural resources of the world can sustain 500 million people at the average American level of affluence. Since the world's population is already seven times that figure, even with no further growth, dispersing the fine emoluments of our technology worldwide would demand a drastic reduction in our living standards (as materially measured) and, obversely, raising our standards would mean raising the percentage of the world's population living in misery above the presently estimated 80%. It is a hard choice to make, but the world's natural resources (of which we 7%, consume 45%), especially the nonrenewable ones, are a fixed quantity, so we cannot equivocate. If advances in human population and in technological demands were in equilibrium, the unwanted chemical situation would not be so difficult. But in America, for instance, the population is currently doubling every 63 years,[5] while consumption of aluminum is doubling every ten years, electricity every 12½ years, petroleum every 25 years, copper and zinc every 75 years, and steel every 100 years.[6] It is this imbalance which has so greatly accelerated the environmental crisis in very recent years. But the most profound imbalance of all is a world population doubling every 35 years[5] while food production per capita has been decreasing since 1963[7] with no hope of it turning upward, in spite of panaceas glibly believed by the uninformed.

Problems

Oxygen and carbon dioxide are not unwanted chemicals, but their proportions in the earth's atmosphere are obviously of tremendous import to man and were involved in the earliest concerns over the quality of the environment. The latter appeared in the second half of the 19th century when the brutalizing effects of the industrial revolution on workers became rampantly obvious. But the atmosphere was still thought to have unlimited capacity to furnish oxygen and absorb carbon dioxide. Now we know that from 1860 to 1955 the atmosphere's CO_2 content has risen from .022 to .032%, an 18% increase; but from 1958 to 1962, it increased 1.13%[8] indicating a per year increase 14 times what it averaged in 95 preceding years. This accelerating pollution is due largely to burning fuel at the mad pace dictated by fast-developing technology. The rise in CO_2 from 1860 to 1955 raised worldwide temperatures by .9°F (by 2.8°F between 40° and 70° N. lat.)[8] thanks to CO_2 capacity for absorbing infrared radiation. If this continues, it has been estimated that the earth's temperature by the year 2000 will reach the point enabling the antarctic ice cap to start melting.[9] Complete melting, resulting in a sea level rise of 400 feet, would take 400 to 4000 years, estimates varying, but even at 1000 years ocean levels would be rising four feet every ten years, surely a catastrophic development. This same burning

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of fuel, increasing apace, has led an outstanding ecologist to wonder about the decrease of oxygen in the atmosphere, with all life atuned to a content unchanged in 400 million years.[10] Dr. Cole was concerned chiefly about the fuel burning by power plants, home space-heating, automobiles, and jet planes. But as a further threat to this oxygen supply, we find that marine phytoplankton, which account for about 70% of O_2 recharge into the atmosphere, reduce their photosynthetic activity, and hence oxygen production, in the presence of only a few parts per billion of DDT.[11] Many estuaries in the world, where these phytoplankters are concentrated, are rapidly approaching such concentrations.[12] So much for technologically-induced changes in two of the most important chemicals in our environment.

Unwanted chemicals have occurred in man, as indeed in any animal, since time immemorial through accidental ingestion. A timely example relates to DDT. It is postulated[13] that accidental ingestion of nonwater-soluble substances like waxes and resins in the distant past caused the liver to evolve the production of an enzyme which rendered them water soluble and thus excretable by the kidneys. DDT, being nonsoluble in water, brings into action the same mechanism. However, if DDT is being so attacked at a time when steroid hormones are being deployed, the same enzyme produced in large quantities destroys them, also, denying their performance of expected vital tasks.[14] Such destruction of both estrogens and androgens has been demonstrated in rats,[15] while in several birds the critical role of estrogen in mobilizing calcium for deposit in egg-shells[16] has been shown to be the mechanism whereby DDT is destroying reproduction—the thin-shelled eggs do not survive incubation.[17] Thus in 1969, the last remaining nesting rookery of the brown pelican in California, with over a thousand pairs, fledged less than ten young; the other thousands of eggs were crushed and eaten. All were thin shelled and loaded with DDT.[18] This method of bird extermination by DDT has been demonstrated for several species, notably peregrine falcon, bald eagle, osprey. cormorants, gulls and petrels. It has recently been established that polychlorinated biphenyls (PCBs), a waste product of the plasticizing industries now ubiquitous in waters and animal tissues, including man,[19] also destroy steroid hormones and bird reproduction through the shell-thinning mechanism.[20] Thus an anciently-evolved mechanism for ridding the body of unwanted chemicals is now attempting to rid the body of unwanted products of our technology, whether or not purposefully introduced into the environment, but in so doing is seriously damaging the body, as has been documented in the Mrak Report.[21]

So much has been written on pesticide damage to nonhuman life forms that the reader may best be referred to the fine summarizations now available.[2,19,22] DDT, for example, has been recovered and measured in soil, air, rainwater, ocean, lakes, rivers, and all manner of plant and animal tissues,[23] and from reindeer moss and Eskimos in the arctic to penguins and fish in the antarctic. The pathological import of the load in man, averaging 12 ppm in Americans' fat tissues, is under extensive study. Whenever broadcast, from the ground or by airplane, an appreciable quantity is air-transported, to be later deposited by rain anywhere in the world. The same air-transport mechanism of distribution has been shown to be identical, whether the substance be pollen, DDT or radioactive strontium.[24] The phenomenon in the case of radioactive chemicals is instructive to review, if only because it shared with pesticides the same initial underestimate and apathy, followed belatedly by great concern.

The Atomic Energy Commission has repeatedly underestimated the radioactive fallout from atomic bomb testing. Yet by 1957, a report of its Biological and Medical Advisory Committee had concluded that "fallout from tests completed to that date would probably result in 2,500 to 13,000 cases of serious genetic defects per year throughout the world population."[25] More recently fallout from the plutonium plant at Rocky Flats, Colorado, is causing concern,[26] and leakage from the Hanford Works in Washington resulted, among other things, in wild duck, feeding on algae in "storage basins," containing 0.1 microcurie of P^{32}. A pound of this meat would contain five times the yearly permissible radiation in human beings.[27] Incidentally, the waste burial grounds at the Hanford Works have been aptly described as "the most costly tombs since the days of the pharaohs—and hold as much radioactivtity as would be released in a nuclear war."[28] Geologists are concerned over what earthquakes might do to these burial vaults.[28] Dangers from radioactive fallout, which is still produced from underground tests and "plowshare operations," are insidious in many ways, from unpredictability to delayed reactions. Thus, thy-

roid nodules in Utah children detected in 1963 are believed to have been the result of iodine-131 fallout from atomic explosions 15 years before at the Nevada test site.[25]

Automobile exhausts are the cause of notorious chemical contamination of the air, the uncontrolled internal combustion engine emitting in exhaust 9,000 ppm of hydrocarbons, 1,500 ppm of nitrogen oxides, 3.5% carbon monoxide (an exclusively man-made pollutant which has now reached a maximal global atmosphere level in the range of 0.1 ppm.[13]), and amounts of lead varying with the gasoline used.[29] If we overlook the smog involvement and consider only the lead, a pretty severe poison, we find that since its introduction in 1923 into "improved" gasolines, it has increased in the ocean, in food crops, and ultimately in human blood, where in some areas it is approaching toxic levels.[25] As might be expected, lead in the air increases with traffic on the road and decreases with distance away from the road, as has been demonstrated in tests on U. S. Highway 1 in New Jersey.[30] The same distribution of lead to proximity of highways has been demonstrated for various wild plants, vegetables, oranges, muscles of wild animals and human blood. But lead is only one metallic air contaminant. Atmospheric precipitation has been monitored throughout the United States for zinc, copper, iron, manganese and nickel, for instance, and whenever found they were in association with human activities.[31]

One of the greatest air contaminants is sulfur dioxide produced mostly by fossil-fuel electric generating plants. The earlier-mentioned out-of-hand acceleration of demand for electricity has developed this into an acute problem. It is estimated that in 1970, 37 million tons of sulfur oxides will be emitted into the atmosphere over the United States.[32] This contaminant is much more than a respiratory nuisance. It has been statistically demonstrated that when sulfur dioxide reaches between 0.2 and 0.4 ppm in New York City, excess deaths over expected are 10 to 20 in a day.[33]

Sewage treatment plants are turning out not to be unmixed blessings. Their contribution of nitrates and phosphates to eutrophication or overenrichment of natural waters—turning them eventually into septic waters—has grown to crisis levels throughout the world.[4] These compounds occur naturally, of course, but between sewage treatment plants and fertilizer run-off from crop fields, they are increasing to hazardous concentrations even in underground waters. Nitrates in excess of 5 ppm are unsafe for domestic animals and at 8 to 9 ppm cause cyanosis in infants by interfering with hemoglobin function. Yet some wells in the United States are now exceeding 3 ppm nitrates,[25] and the upward trend will accelerate with increasing use of fertilizers and resort to sewage treatment plants. As for the phosphates, which contribute so significantly to eutrophication, there are two other truly major sources of contamination besides sewage effluents—fertilizer run-off and detergents. The latter became mostly biologically degradable in 1965, ending an era of foaming natural waters, but they are still overloaded with phosphates.[34]

Cures

Although the same laissez-faire technology which has burdened man's environment with all these unwanted chemicals cannot be expected independently to clean up the environment, industry is already doing a lot on its own initiative, as every issue of the relatively new journal "Environmental Science and Technology" abundantly attests. The three major car manufacturers start this fall to make cars designed to run on lead free gasoline.[35] Great progress is being made in the desulphurization of fuel, one plant in New York investing 150 million dollars in a facility to reduce the sulfur content of fuel oils.[36] Since most pollution-control programs involve disposal problems, this has created an active technological research area. Thus, electrostatic precipitators can now remove 99% of fly ash particles from the stack gases of coal-fired power or other plants, and already 17.4% of the 30 million tons per year of fly ash produced by power plants in the United States is recovered for byproduct reuse.[37] The massive use of pesticides is slowly being replaced by "integrated pest control" or what is increasingly referred to as pest management,[38] but the pace of this change will surely increase if only from public pressure. Sewage treatment technology is not only developing fast but disposal of effluents on forest and field crop lands, using these as "living filters" of nitrates and phosphates while contributing to crop production,[39] is offering a way out for the major cause of eutrophication of waters. The detergent phosphate problem is headed for an early solution.[40] The shift in power generation to atomic fuel is relieving the air of major pollutants while posing

problems of radioactive leakages and wastes. Radioactive fallout is probably the greatest of environmental hazards, but progress in its abatement or prevention is disastrously obstructed by the military and industrial secrecy which thoroughly shackles all concerned citizens.

In the area of government, ridding the environment of unwanted chemicals will demand inducements for a reorientation of technology and promotion of educational goals appropriate to the environmental crisis and therefore approaching crisis dimensions. The fundamental problem is tracing the course through the biosphere of those thousands of new chemicals being released into it every year. This will be a job of staggering magnitude demanding, for certain, a complete shift in chemical engineering's emphasis from the synthesizing to the analytical end of the spectrum. Ultra-ultra-micro techniques for detecting these chemicals at the minutest levels will have to be developed, as has been done for DDT with its current parts per billion detection. Developing and using these procedures in a fantastically elaborate monitoring program in man and environment will put a very great burden on industry to produce the required apparatus and on universities to produce the required analytical chemists. This will have to precede the acknowledged eventual solution: automation and computerization. Nothing more certain can be derived from a reading of the extraordinarily authoritative, documented, and current (December, 1969) 677-page "Mrak Report."[19,21] The news media, printed and visual, should accordingly emphasize that it is not a case of No-Pollution or Jobs, as an unfortunate TV program recently put it, in spite of otherwise excellent context, but a case of a superabundance of new and different jobs for a retooled economy. Such retooling came fast after Pearl Harbor and must come as fast in this environmental crisis.

Blaming technology for all the ills of our environment may be popular but there are responsible people doing a tremendous amount of creative thinking about the problem. Rep. E. Q. Daddario's Subcommittee on Science, Research and Development has contributed notably to this effort. It has proposed a bill to establish for congress an Office of Technological Assessment. This O.T.A. idea is currently under stringent scrutiny and may not necessarily be the answer. To assess the eventual impact on man or environment of a proposed technological development demands prophetical powers which may not be available even in computers. Yet as René Dubos has so succinctly written: "technological skill cannot create anything worthwhile if it does not serve a worthwhile purpose."[41] In this extraordinary book (Pulitzer Prize, 1969), Professor Dubos makes an urgent plea for the development of a "science of humanity," or the proper study of the whole man in a world of technology—the whole man being much more than just another animal. This plea comes to mind when judging the putative O.T.A. It would appear essential that man's needs and tolerances be far better known than they are today before any O.T.A. can prophesy the consequences of new technology. And certainly central to this new learning would be an expansion of that Environmental Medicine which Dr. Paul Kolin, director of the National Institute of Environmental Health Sciences, has defined as "Recognizing and dealing with health disturbances resulting from environmental stress."[1]

The polemics of scientists decried as "prophets of doom" [5,7,42-44] are actually doing a necessary job. The news media are also helping them awaken the people to the bona fide environmental crisis. Now, technology must flip over and heal the earth's wounds it has impersonally created. One can be cautiously optimistic but certainly not enthusiastically or smugly sure that doom can be averted. Action now is the key criterion.

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The Status of the Law as a Tool for Protecting the Environment

Joseph W. Little

"Why," people ask, "can't the law do something about polluters and exploiters of our natural environment?" One answer is that the law can do something if the people will vote in legislatures that will enact the necessary statutes and spend the money needed to do the job. But something more specific is meant by the question. Askers want to know why the enforcement power of the state cannot physically move in under the direction of the courts to stop polluting and exploiting acts.

Historical Background

Several important facts prevail against that kind of direct action in environmental cases under our law in its present status. In the first place, the law has evolved with a very strong propensity to protect rights to own and to use private property and to make it freely transferable among individuals. These concepts have encouraged the utilization of land and natural resources in the aggrandizement of power and wealth. One apparent consequence of this, when coupled with a seemingly inexhaustible supply of natural bounty and a population of industrious people, has been the building of America's gigantic economic empire, bringing unmatched affluence to most of her people. Another consequence has been the slow buildup of by-products that seem on the verge of destroying the ecological basis of life as we know it and that are certainly destroying the esthetic qualities of the environment that have great meaning to those of us who wish man to live in harmony with his natural heritage. The processes of pollution, exploitation of natural resources and uglification of our living places have indeed produced an environmental crisis of proportions unthought of scarcely a decade ago. Suddenly the urgency of immediate control over these processes has become evident and people want to know why the law has not and is not doing something about it.

That is, of course, a proper question. Offensive environmental conditions are consequences of human behavior and law is society's tool for regulating human behavior. But our law developed historically inclined to favor protection of property interests. Hence, we are loathe to tinker with regulations that affect a man's absolute right to do with his property as he will. Unfortunately, the law did not evolve countervailing doctrines fully effective in protecting the public's interest against giant quantities of unwanted wastes that spew out of modern processes into public domains.

Protective Regulations

Owing to the massive scale of environmental abuse in our land, it seems apparent that the speediest way for putting a stop to it will be through enactment of protective regulations, policed and enforced by public agencies having authority to haul offenders into court without delay. The courts in turn must have the power to levy telling penalties and to issue orders to halt polluting activities. In this fashion the police power of the state would be directly responsive to protecting the public's right to a pure environment.

Some antipollution regulations and public authorities exist, but they are too few and too weak to master the job that waits to be done. Moreover, it is not certain that the public is willing to take the needed action in protecting the environment when to do so would threaten some other public interest. A typical episode illustrates this point.

In the summer of 1970 an International Paper Company mill located on the lower end of Lake Champlain near Ticonderoga, New York, was dumping industrial sludge into the lake. The state of Vermont asked that New York and federal authorities halt the flow of damaging materials into the lake, which laps the Vermont border for more than 100 miles. The paper company announced that it had no intention of stopping the pollution because it was moving to a new nonpolluting facility in a matter of months. Governor Rockefeller of New York, well aware that closing the plant would force an economic crisis in the vicin-

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ity, reportedly expressed a belief that the situation was not so bad as the Vermonters thought. Meantime, Vermont officials are waiting to see what Interior Secretary Hickel will do under federal authority and purportedly are deliberating a lawsuit against the state of New York. While the buck bounces from official to official, the pollutants continue to pour into Lake Champlain.

The Lake Champlain situation, although a bit complex in the division of responsibilities among several governmental units, shows that effective public regulation will not come easy so long as costly economic repercussions are to be contended with. "Why is the law so slow?" people ask. The problem is that the people either have not known enough or have not seen fit to regulate themselves properly. Or, if you prefer, vested interests have been able to hold off protective public regulations that would redound to their detriment. In the absence of appropriate regulations imposed by statute, or by constitution, or even by private agreement, environmentalists have had to fall back on private lawsuits in attempting to protect the environment.

Private Lawsuits

Under the present law, a person wishing to abate what he perceives to be an unwarranted environmental insult through private litigation faces considerable uncertainty of success. Before he may maintain a case in court against an offender, the complainant must have what lawyers refer to as a cause of action. Or, putting it another way, there must have been a breach of a legal duty owing the complaining person by the offender. Although legal duties may arise under the common law (the case by case evolution of law inherited from England), by constitution[1] or by agreements between individuals, most private lawsuits involving injuries to a plaintiff's body or property fall under the common law of torts.

The law of torts embraces a scheme of legal duties with regard to injury caused a person by the intentional or negligent acts of another. Such an act can include wrongful use of one's own property as, for example, in causing an automobile crash through dangerous driving. Moreover, legal doctrines or nuisance have evolved in situations where real property is being utilized in damaging ways; such as exhausting dense and corrosive fumes into the atmosphere, resulting in damage to surrounding land and buildings or physical harm to the nearby population, or operating an offensive slaughterhouse in a residential neighborhood. These important doctrines,[2] which in effect limit the pervasive concept that a man may do with his property as he pleases, developed in situations where clear compensable injury was being suffered by individuals or classes of individuals.

Once a person has won a legal argument in court, he will be looking for judicial relief; a remedy for the wrong done him. The most common remedy is monetary, computed under a sort of jurisprudential arithmetic equating harm with dollars and cents. Obviously, the payment of money for harm already done will not be an effective remedy in environmental situations in which the offender finds it more economical to pay damages than to mend his ways. If that be the case and if the plaintiff can show that his legal remedy (meaning money) is not adequate relief, a court may order the defendant to cease his harmful course of action. These orders the state will enforce through its police powers.

In deciding whether to issue injunctions in nuisance cases, however, courts have attempted to strike a balance between the economic losses resulting to one group of people as an effect of stopping the activity against the economic damage resulting to others by its continuation. The side showing the greatest good for the greatest number theoretically wins the argument. Unfortunately, courts so far seem to have considered only the short-term injuries being complained about in weighing the balance without concerning themselves with long-term ecological effects. On that basis, it frequently can be made to appear that the most good for the most people will be served by allowing the pollution to continue. This kind of reasoning is specious, of course, since it allows the continuing aggregation of many small sources of pollution until they eventually reach damaging totals.

This scheme works well enough to handle most private legal disputes and is applicable in those few environmental cases where an individual can show that he has suffered compensable injury by the polluting acts of another. But even apart from the remedial shortcoming previously mentioned, the common law is not an apt tool for protecting the public interest. The common law in the main has been forged in the fires of one-against-one encounters between competing individual litigants. It has fostered a one-to-one legal morality and meets the needs of settling disputes between individuals. But environmental insults

frequently do not render immediate compensable harm to anyone or, if clear harm is caused, attributing it to any specific person or even any specific group of persons may be impossible.

To illustrate the former point, when the hot discharges from a nuclear power plant threaten to destroy the life of a public salt water marsh,[3] but with no direct damage to any private individual's person or property, how is the common law to apply? Surely damage accrues to the public in the loss of a bit of the natural environment held in the public domain, but the injury does not fall into the one-to-one context of the common law.

To illustrate the latter point, each particle of pollution spouted into the atmosphere carries potential for damaging human and animal life. Accumulate small doses of wastes from thousands of smoke stacks and tens of thousands of motor vehicle exhaust pipes and a great number of persons will suffer definite physical injury—injury of a compensable kind had it been caused by a single person or even by an identifiable group. Yet when there can be no substantial attribution of culpability to specifically identifiable offenders, private lawsuits will fail for want of a proper defendant. In both these situations significant harm is being done, harm that the law needs to provide remedies for righting and preventing. Yet they do not fit the common law mold. This demonstrates one great need if the law is to adequately defend the public interest in crowded, complex cultures. In short, it needs to develop more precise concepts of statistical morality.

Changes in Laws

Nowhere is it more evident than in environmental issues that the law should be a servant of the public. It is a servant that can be employed to preserve a healthful environment if the people provide the proper instruments for its use or, if left unchanged, it may serve to protect the hand of exploiters in quest of economic gain. As observed earlier, our private law has come historically to favor utilization of private property with restrictions imposed only in the classic nuisance situations previously discussed. Hence, left unchanged the law appears to have a bias toward protecting the right to engage in exploiting and polluting behavior rather than toward inhibiting it.

This status suggests two important propositions. The first is that the law cannot be left unchanged. The second is that lawyers, who are merely the wielders of the legal instruments, cannot by themselves make the changes. The first point is obvious and needs no further bolstering here. The second, however, deserves careful attention because it indicates the opportunity and desirability, indeed the necessity, for lay individuals to participate in tooling up the law to regulate behavior so as to conserve the healthful qualities of our environment.

The environmentalist movement could not start until someone got worked up. Perhaps the conservationists and outdoors people were first with their cries of alarm about the ravages of America's remaining natural areas. But that was not enough. "Somebody had to sue somebody before the legislature—in enlightened self-interest took long overdue action," said Victor Yannacone, fiery lawyer who with his legal actions brought the DDT perils to the attention of the nation. In putting the prod to the legislators, Yannacone has triggered the key to obtaining effective legal regulations and, in his protracted legal maneuverings, has demonstrated the bluntness of litigation as the sole legal tool for controlling abuse of the environment.

Although many lawyers are bringing innovative lawsuits[4] and courts are beginning to accommodate their procedures and remedies to relieve environmental wrongs, the case-by-case evolution is tediously slow in altering its philosophy of behavior regulation. This is not a damning criticism, however, because the courts have neither the function nor the resources to sift reams of scientific data in order to make scientific conclusions about the ecological effects of various practices. Despite protestations by them that they were merely applying the law, not making it, lawyers and judges employed the judicial process in earlier times and with simpler issues to mold law to produce behavior conforming to standards divined by them as representative of public mores. But courts cannot decide how human behavior ought to be regulated in preserving the environment nor what form the law ought to take in achieving regulation. The very diffuseness of the ancient process, spread over thousands of unrelated lawsuits and extended periods of time, makes it too slow and inexact in responding to issues needing rapid and precise resolutions.

By contrast to the plodding common law process, except where constitutional guarantees intercede, legislatures have the power to produce new regulations at their pleasure. Moreover, they can conduct extensive legislative investigations into controversial issues and deliberate the possible

effects of legislation on the interests of all the people. Therefore, it is the legislatures that must be called upon to make fundamental changes in laws affecting the state of the environment, if changes are to be made in time for the law to have significant effect on what happens to it in this critical period.

Vocal People

Needless to say, in deciding what laws to enact legislatures will be responsive to the wishes of the vocal people. Therefore, professional people have both unusual opportunities and special responsibilities to raise their voices in waging environmental battles in the legislatures. They are equipped to understand the basic ecological arguments being advanced; they are accustomed to making decisions that require a trade-off of one set of goals against another; they are members of professional organizations that can multiply the voices of individual members in speaking for or against the various sides of any issue; they have unusually heavy vested interests that may be affected by the direction society goes in regulating itself; they are prepared better than most to be spokesman for the people of their communities, and they have the resources to support principles they believe in.

Any professional layman can make it his business to become fully informed and take a stand on environmental issues. He can encourage his governmental representatives to vote for needed legislation and he can support candidates that espouse an enlightened concern in that regard. And, especially, he can oppose political incumbents and aspirants who are tied to vested interests that seem intent upon unabated pollution and exploitation. Professional laymen can also join with other citizens in bringing lawsuits that will publicize misuse of the environment by private, industrial, and governmental offenders and in doing so will help create the necessary social state of mind that foreshadows change. Or, as a minimum, professional laymen can join and encourage groups and organizations that are attempting to detect ill uses of the environment and to do something about them.

Blind adherence to a doctrinaire viewpoint will not suffice, however. Not every proposal for "environmental legislation" will be sound. Failure to discriminate will obviously undermine the repute of any person or organization. Moreover, trade-offs in goals will continue to be made, and proponents of environmental regulations must be able to convince the majority that exchanging short-term costs of control for long-term benefits of a continuing healthful environment is a good investment.[5]

Florida, blessed with unusual bounty in its natural beauty and pleasing climate, is beset with desperate environmental ills as exploiters continue to defile and obliterate the very attractions that make the state a desirable place to live. Fortunately, however, the state also harbors a great many people and organizations that are fighting to delay the degrading processes until the rest of the population becomes energized to stop it. Among the organizations, the National Audubon Society has been especially effective in stopping the jetport in the Everglades and the Alachua Audubon Society has been the leader in opposition to cutting the Cross Florida Barge Canal through the course of the Oklawaha River. Furthermore, Conservation 70's, an organization devoted to legislative change, is working throughout the state to encourage the adoption of environmental legislation. In addition, many other private organizations, governmental agencies and individuals, including many members of the Florida legislature, have taken strong stands in favor of pro-environmental protection.

When and if legislatures provide effective legal tools for controlling pollution, for regulating the exploitation of natural resources, and for outlawing the rampant uglification of the places we live in, then much of the burden of keeping the legal tools honed and sharpened for effective use will fall again to the legal profession. Nonetheless, the lay persons' job will not be done. With evergrowing populations and rapidly expanding cities new sources of environmental abuse will erupt and old ones will escape official detection. Concerned citizens have proven to be the best sensors of this offensive behavior and will continue to be. Meanwhile, the encrusting processes of the law will begin to place deposits on its joints, making it less flexible in application to new situations. Hence, the people must take a greater interest than ever before in watching over the legal tools they provide for regulating behavior. Above all, the people must realize that what is or what is not a proper mode of behavior in a complex modern society is not a subject to be left solely to lawyers and judges. The vocal people will decide what is appropriate behavior with regard to environmental issues, as with many others, and through their legislatures the vocal people will influence it one way or the other. What the influ-

ence will be is of vital importance. The wielding of it falls as an heavy responsibility upon those among us who are suited to shoulder it.

Footnotes

1. Although most legal scholars would probably view it as a strained interpretation, some lawyers are urging that the ninth amendment to the U. S. Constitution guarantees the people a right to a healthful environment. ("The enumeration in the Constitution of certain rights shall not he construed to deny or disparage others retained hy the people.") Others like Senator Gaylord Nelson of Wisconsin are urging the adoption of a new amendment for that purpose. State constitutions may also provide a hasis for environmental rights. For example, the Florida Constitution states that: "It shall he the policy of the State to conserve and protect its natural resources and scenic heauty." Act III, Sec. 7, 1968 Fla. Const.) Already that provision has heen argued in a private lawsuit.

2. Two nuisance doctrines developed in the common law: private and puhlic. The discussion in the text applies to private nuisance. Puhlic nuisance is an offense against the public and is generally treated under criminal law with ahatement heing a responsihility of puhlic, not private, action. See, generally, Harper and James, The Law of Torts, Sec. 1.23 et. seq., 1956.

3. At least two cases involving fact situations similar to this have been litigated in federal courts. The tactic has heen to attack the administrative decision of the Atomic Energy Commission in approving the nuclear installation without considering the ecological effects. (Suing the government or its agencies presents a complex of technical legal issues, which space does not allow covering here.) The trial court results of the two cases have been disappointing for environmentalists. A federal judge in a New Hampshire case concerning thermal pollution of the Connecticut River ruled that the AEC had made no error when it ruled that consideration of ecological effects was outside its regulatory jurisdiction because the AEC's enahling legislation did not call for it. New Hampshire v. AEC., 406 F. 2d 170 (1969). A Florida federal court allowed the issue of thermal pollution to be debated on the merits in a Biscayne Bay reactor case and then ruled that the environmentalists had failed to prove their case.

4. Many suits have been filed in Florida. The ones I am most familiar with are the Environmental Defense Fund's suit against the U. S. Army Corps of Engineers in the Cross Florida Barge Canal Controversy and the suit of Rohert B. Ragland against the Florida Department of Transportation in a case challenging the puhlic taking of private property for building roads. The original petition in the former case made use of the ninth amendment argument; the latter employed the Art. III, Sec. 7 of the Florida Constitution. (Refer to note 1.) So far suits of this nature have been unavailing from a legal point of view. But they have created great puhlic interest that may eventually impel the desired results.

5. Consider this typical situation. Mohawk Airlines increased its service to Burlington, Vt. by having four airplanes overnight at the local airport This required the expansion of the local maintenance operation with a $150,000 per year increase in local payroll. However, it also required nighttime maintenance of jet engines with great disturbance to the community surrounding the airport. Which is more important, the added $150,000 per year in the local economy plus better air service, or the sanctity of a quiet night hy the community? See Burlington Free Press, July 8, 1970, p. 15 col. 6.

6. Two recent treatments of this phenomenon are worth reading. See H. Sutton, "The Erosion of Eden," Saturday Review, June 6, 1970, p. 58, and G. Laycock, "Trouhle in Paradise," Auduhon, May 1970, p. 24.

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At the annual meeting of the American Medical Association in Chicago last June, the House of Delegates resolved that the AMA continue its efforts "to alert the American people . . . to the ever-increasing health hazards of environmental pollution and to the urgent need for expanded research and effective control measures" and that the AMA "further extend and intensify its present activities in pollution control and improvement of environmental health."

Population and the Social, Political and Environmental Crisis

Robert B. Ragland, M.D.

The most important and pressing problem now facing man is how not to destroy himself. The danger lurks on all sides: in the population-food crisis produced by lowered death rates; in the arms race and nuclear warheads; in social, economic, racial and religious tensions, and in man's effort to subdue nature. Man runs a high risk of destroying ecological balance, nature, his environment and, with it all, himself.

Which of these dangers is of paramount importance, or are they more exaggerated than real? In each preceding generation, it is said that there have been crises, that man survived and that he will assuredly surmount these present dangers. The people in their "collective wisdom" will halt the nation's growth at some point, we are told.

Earliest Judeo-Christian tradition gives man dominion over all nature and many people see him as the center of the universe, all powerful and all important. But a moment's reflection brings to mind a precept we use with our children, namely, that with power and authority goes responsibility. We ourselves must show responsibility and caring for all of life and all of nature.

Biological Aspects

Man is not independent of biological laws; he is subject to them. His failure to understand himself, recognizing biological laws as laws he must obey, constitutes one of his central problems. We have flown to the moon but according to the natural law.

Our civilization is at a crossroads and we are now faced with a reduced quality of life and the possibility of the loss of our humanity. We have a clear choice. Either we provide ourselves with more reliable biological and psychological information on which to base our estimates of man or, when the final moment of truth arrives, find that we have destroyed life's highest values, perhaps even that we have been "selected out" along with the American Bald Eagle, pelican, orangutan, gorilla, chimpanzee, dinosaur and dodo bird. We are all animals, but we are also men. What important choices will mankind make?

Several billion years ago our earth was formed. The first life began a billion or so years ago as a simple, self-limited, temporary, straight-line form which utilized a finite unreplenished source of supplies which it converted into its own waste products. We, and all other subsequent forms of life, owe our existence to the creation of another life-form which utilized those waste products and replenished the original source of supplies, thereby converting the original straight-line system into a circular one, interdependent, more complex, more stable and with an air of permanence. From this original substrate, man emerged from his primate background only 1 or 2 million years ago. It took until the middle of the 19th century, a million or so years, for his numbers to reach a billion but by 1930 a second billion was added; the population doubled. A third billion has already been added and we are working on the fourth billion. Five to 8 billion are expected by the year 2000 if present birth and death rates continue.

In the United States we did not have a population of 100 million until about 1920 but in less than 50 years we have added another 100 million and a third 100 million is anticipated by the year 2000, only 30 years hence!

In Florida there was a population of 140,424 in 1860, 150,000 in 1865, 391,422 in 1890, 1,488,211 in 1930, 4,951,460 in 1960 and 6.6 million in 1970, an increase of 35% this past decade. A population of 8 to 10½ million is expected by 2000 if present apparent trends continue.

In Florida much of the population increase comes from in-migration but for the world the increase represents the excess of births over deaths. Some of these births are the result of unwanted pregnancies but far too many represent wanted children—in America, the third or fourth child in middle class families.*

In America, Florida and Jacksonville, we have a great penchant for progress and growth and de-

*Special tabulations by the Bureau of the Census from the Current Population Survey, March 1966, show that in the period 1960-1965, 68.2% of U.S. births were classified as "non-poor," 31.8% as "poor, near poor," contrary to the popular belief that the poor are overpopulating this country.

velopment. It's understandable, for man is a creature of habit and tends to indulge in repetitive behavior, in behavior patterns, whether it is profitable or not. We come by it quite naturally. "In nature animals prosper best, survive in largest numbers, live longest, reproduce most abundantly where they are expanding to fill a vacant environment such as our forefathers found here in America a few hundred years ago."[1] This mania for growth and size is then not surprising. It has increasingly been brought to my attention that the same thing applies to societies, to our American society, for example.

Population and Problems

But our country is no longer vacant, it is overflowing now. It is no longer prudent to try to bring in new industry and new people to a metropolitan area to share the tax load because of another biological principle. The rate of growth of problems is geometric though population increases arithmetically. But this is something we already know. The man in the city demands more services and he is more dependent than the solitary farmer. The problems of the cities are well known and they are unsolved. There are shortages of doctors, nurses, schools, teachers, and every kind of service; we complain about the quality of the services we do receive. ". . . . transportation planners contend that most of our cities are too large to manage—and that it is from their size that traffic congestion, air pollution, high crime rates, and other social ills flow. They advocate urban dispersal—breaking our big cities into smaller, workable units able to satisfy within their borders most of the resident's daily wants."[2] Yet many of our leaders are exhorting industry and people to move to our particular city, and we think the underdeveloped countries should enjoy our industrialization, urbanization and large scale mechanized agriculture. Regarding density, "no one ever takes the trouble to ascertain the average or modal attitude of any community in this respect. The control of a community's development passes automatically into the hands of those who profit materially by its expansion (those) who chiefly control the press."[3]

It is clear that one aspect of the population crisis is the present distribution of people, the concentration of so many in such a small space, e.g., on our eastern seaboard, and the problems that spring from this concentration.

A taxicab driver in New York proclaimed to Dr. Rene Dubos of Rockefeller University that in America we all have much leisure time and plenty of automobiles and that we all live like kings. Even while he boasted, the two kings spent hours waiting for the traffic jam to subside between Idlewild and New York City, all the while enjoying the fragrance emitted by thousands of closely packed internal combustion engines.

The highest concentration of kings, saviors and millionaires I know of are gathered together under the auspices of our state hospitals. We are a world gone mad. Our values are insane but no asylum, no place of retreat and rest is in store for us unless we change our ways. Don't we really want more knowledge, culture, quiet and rest, more fair play and real happiness, and not more business, pollution and people?

Dangers in Adjustment

A very significant book, "So Human an Animal" by Dr. Dubos, reminds us that man is earthbound, notwithstanding the Moon or Mars. Man is highly adjustable and we have adjusted to pollution and overcrowding, though we are and will remain earthbound. But our very adjustability is dangerous for man's welfare and future. Adjustments to the environment through blunting of awareness may interfere with recognition of human values. Indeed, in our search for power, wealth, mobility and speed, what has happened to man's humanity?

Most of us since the advent of the automobile and airplane, television, air-conditioning and the population explosion have more acquaintances than ever before. But we have proportionately (if not absolutely) fewer friends and there is less depth to our relationships. As we insulate ourselves from the world do we not lose something of vital importance?

Dr. Dubos, a biologist, tells us that population pressures constitute the most important single handicap to creating urban environment with proper biological qualities. He notes that we shape our environment which in turn shapes us and he describes the sterilizing effect of modern housing developments as "disposable cubicles for dispensable people."

Dr. Dubos points out that a highly specialized society is rarely adaptable and he emphasizes a variety of challenges plus soils for the germination of seeds now dormant in man's nature.

We are using the earth as if we were the last generation. Is it not so? Look at the auto graveyards, at the Everglades, at the Oklawaha. What we have not already destroyed is threatened.

If we are to save anything—and save ourselves —then population must be rapidly stabilized. Primitive people generally succeeded in stabilizing their population level. Dr. Dubos concludes that careful husbandry rather than exploitation is our key to survival. Our economy must be based on strict ecological principles which by no means implies a completely static system. We must emphasize the study of ecological systems, the science of humanity, and the idea that speed is less important than direction. The problem is more acute in the United States than anywhere else because we probably produce more pollution and cause more destruction of the environment than any other country, and more per capita.

Crowds and Cars

Daily I see men and the other animals and plants dying and being destroyed partly by the sheer weight of large numbers of the species, self-named and, it seems, misnamed Homo sapiens—thinking man—and as John Donne said I am diminished because I am involved in mankind.

"Aluminum beer cans and corn fields inherit the good earth. We stand ankle deep in garbage, aiming for the moon."[1] . . . . and Mars. My first complaint is subjective, related to mere enjoyment of life, to love and feelings—what I regard as the sine qua non for life that is not death, for me and all men. What is more important than the quality of life?

Secondly I am concerned about the biological effect on man and all of nature of large numbers of people and increasingly impersonal technology. It is not necessary or within the scope of this paper for me to go deeply into the matter of pollution though we must all wonder what are the long range effects of pollution on the human body. But what about other biological effects?

Wherever man goes he degrades; he simplifies ecological systems which then are less stable than complex ones. A pure forest of balsam, mimosa, chestnut or elm may be destroyed by a single specific disease agent but a mixed forest will show relatively little damage. Man is an architect of monotony, straight highways, planted pines, wheat fields, ad infinitum. What is the effect of monotony on the human animal? What important secrets applicable to man will be lost with the last alligator, gorilla or mountain lion? How much space does man need? How much solitude and stillness? What does displacement from a home, job and familiar surroundings do to a man? Who knows? And for many of these questions, who cares?

It would seem wise to pause in our headlong rush into "progress," into "growth and development" to study and research and understand what we are doing or considering doing. Is progress our most important product? Or does it involve quality, variety, brotherhood and love?

What about the automobile? Let me tell you what we are doing with our cars and highways in order to serve more people. In Florida there were 985,000 cars registered in 1950 and 3,628,000 in 1968 (compare table 1). A glance at the table provides graphic information regarding the proliferation of automobiles, mileage traveled and fuel consumption.* The National Association of Rail-

*Visitor days at our national parks were 3 million in 1930, 33 million in 1950, 79 million in 1960, and they are expected to reach 150 million in 1970. (Rene Dubos, Accent Program, University of Florida, 1970)

Table 1.—Saga of the U.S. Passenger Car.

	Year			
	1940	1950	1960	1967
U.S. Passenger Cars and Taxis Registered (thousands)	27,466	40,339	61,682	80,414
Total Mileage U.S. Passenger Cars (millions)	249,600	363,613	588,083	788,708
Total Fuel Consumption U.S. Passenger Cars (million gallons)	16,323	24,305	41,169	55,323
Pollutants Emitted by U.S. Passenger Cars (tons)				
carbon monoxide	n.a.	n.a.	46,000,000	61,000,000
hydrocarbons	n.a.	n.a.	14,000,000	16,000,000
nitrogen oxides	n.a.	n.a.	5,000,000	6,000,000
lead	n.a.	n.a.	160,000	210,000
World Registration Cars, Trucks, Buses	n.a.	70,424	126,908	200,582
U.S. Registration Cars, Trucks, Buses	n.a.	49,529	73,869	96,945
U.S. Share World Registration Cars, Trucks, Buses	n.a.	70%	58%	48%

The automobile is the means by which Americans have achieved unprecedented mobility. As more Americans drive more passenger cars which consume more and more fuel, the deleterious impact on air quality rises markedly. Meanwhile, other parts of the world are increasing their share of motor vehicle traffic.
Sources: National Air Pollution Control Administration; *Statistical Abstract of the United States 1969*, U.S. Department of Commerce.

road Passengers states that "based on U. S. Government estimates, an area exceeding that of the six northeastern states of Massachusetts, New Hampshire, Vermont, Rhode Island, Connecticut and Delaware is dedicated to motor traffic. This does not take into account the considerable amount of land devoted to parking lots. It is estimated that nearly 70% of downtown Los Angeles is now devoted to streets, freeways and parking areas."

The February 1968 issue of the National Geographic asks, "Does the nation actually need new highways on so mammoth a scale?" Francis G. Turner, then director of the Bureau of Public Roads in the new Department of Transportation answered: "Today, Americans drive 97 million cars, buses and trucks. Ten years from now we'll be operating 120 million vehicles—and the number goes up from there. . . . Better roads and highways are vital to our social and economic welfare and to national defense." Are they? The National Geographic tells us in the September 1969 issue that "to cope with the proliferation (of traffic) federal and state governments construct the Interstate Highway System, adding 42,500 miles to a nation whose paving rights-of-way now occupy as much land as the State of Kentucky." "The super-roads are gobbling up 1.6 million acres for right-of-way, an area larger than the State of Delaware. Enough material is being excavated to bury Connecticut knee deep."[5] "But new roads often become clogged the instant they open, and proposed freeways threaten parklands and displace city residents. Social planners grow ever more appalled at the auto's insatiable demands. We have been operating on a mistaken principle—that the transportation routes should go where the people are. It's wrong. People tend to go where the transportation is. . . . There are two basic approaches to the transportation problem: increase the capacity of the system or reduce the requirements."[6]

It is suggested that the latter can be accomplished by shortening "the desire lines of the people to provide for almost all their needs in a more concentrated area." A similar effect can be had through a different standard of living, by the practice of frugality and the avoidance of waste, and by reducing the number of people, preferably by population control.

Food and Famine

Some few very personal events and a greater number of happenings affecting the public at large focused my attention on subjects such as waste disposal, pollution, destruction of our natural resources, highways, and the power of eminent domain. I plead guilty to wanting to save the Oklawaha, Redwoods, Marshes, Everglades, live oaks in front of Duval Medical Center, open space, local forests, springs, beaches and the like.

I tried for a while, only to find that the dikes being built to protect them were being threatened by higher levels of water on the outside. I realized that the dikes, though temporarily useful, were of no real avail unless someone turned off the spigot of a burgeoning population. My interests turned to population statistics, to birth and death rates, and to food production and to ecological systems. In the light of what I learned my previous victories and defeats seemed inconsequential. What I had been doing, what was then featured in the press and in Congress all seemed at best trivial, at worst harmful and counter to mankind's best interests. I did not discover anything new; I just read the facts and figures already collected, studied the interpretations of them and quit using denial as a mechanism of defense. What are the facts I allude to?

The Earth is a relatively closed system with certain fixed natural resources, the Moon and Mars notwithstanding. Man is an animal and behaves like other animals in many ways. However, he has awareness of himself, and has evolved as "Man" for some 2 million years to his present state in which he has vast powers unknown to the rest of the animal kingdom. About 30 years ago the medical profession came into possession of new weapons against disease which have produced death control such as man never before had. Death rates have plummeted, particularly in the underdeveloped nations, but birth rates have not altered significantly. The demographic transition from high birth and death rates to low birth and death rates has not occurred. The result has been an unprecedented increase in population, especially in the underdeveloped world. Food production has increased but not enough. Significant reduction in birth rates is such a complex problem that many think this cannot be accomplished in time to avert a worldwide famine in the 70's or 80's.

Though we do not expect mass famine in this land, what will be the results, here as well as worldwide, of millions of starvation deaths? Then what raw materials will be supplied to the 6% to 7% of the world's population which consumes 30% to 50% of the yearly resources produced? Will we "import" nuclear bombs rather than tin?

After the world population stabilizes at a figure less than the present population, by means of war, pestilence, famine or birth control, it may be possible to reap the benefits of new agricultural research and feed adequately more than 2 billion people. However, we can't have our cake and eat it too. In the United States, which is relatively uncrowded by comparison with the rest of the world, we are already reaping the benefits and results of using the lion's share of the world's yield of basic resources, while consuming the fertility of Iowa's wheat fields at the rate of 1% a year. We are having trouble with pollution problems and life just isn't quite as pleasant in many ways as it used to be. Knowledgeable scientists such as Dr. Dubos and Wayne H. Davis (New Republic, Jan. 10, 1970, "Overpopulated America") make it plain that there are two important variables which determine our destructive impact on the earth. They are population density and affluence; the more affluence the more destruction. It is estimated conservatively that an American is 25 to 30 times as destructive as an Indian and the wealthy American is more destructive than the poor black American who is on a par with the Indian. Though millions in India may starve it is thought that their land will come back. But what of ours? Will it survive the spreading concrete, the high concentrations of pesticides, herbicides, fungicides and other pollutants and toxic substances? We are already running out of space. Our national parks and vacation lands are so crowded that a September vacation is much to be preferred over August: yet the forest products industries are pressing for higher utilization of public forest lands. We don't really have enough trees and if we grow them everywhere as a crop what will happen to our ecology—and to man? That vacant land is keeping us alive physically and emotionally and probably doing all it can.

What about the arm's race? I read that the United States and Russia have stockpiled together the equivalent in nuclear weapons of 15 tons of TNT for every human being on earth and further that we are trying to devise new ways to deploy or defend against these weapons. I do not believe that there is either defense or victory possible in this area of nuclear weapons' use, but there is the problem. Japan invaded Manchuria and participated in World War II, at least in part, in search of new living space for her crowded people; Hitler sought lebensraum. What are the effects of population pressures on the arms race? Nothing is more destructive of the environment and human values than war and preparation for war.

The drama unfolding around us is the cataclysmic tragedy of too many people, many of whom are using our resources as though there were no future. And because of a lack of interest, tomorrow may be cancelled.

Preventive Measures

Perhaps you will be interested in what is being done about it. The Population Reference Bureau, a private organization, has been collecting and disseminating information regarding local and world population for some 40 years. There are a number of good books written on the subject by agronomists, statisticians and biologists. President Eisenhower expressed his concern about population growth in 1963 and in 1965 President Johnson said, "I will seek new ways to use our knowledge to help deal with the explosion in world population and the growing scarcity in world resources." A private organization under the name of Zero Population Growth with headquarters in Los Altos, California, has been formed with self-evident aims.

The environmental crisis exploded in the mass media in early 1970 but only a continuing effort will convert "chatter" and what seems to be "all wind and no rain" into something of real and durable value.

On the negative side: In 1966, $154 billion was the figure given for global military expenditures. Our own military budget is about $80 billion a year.

In 1968 the Ford Foundation reported the grand total of $80 million was devoted to the population crisis outside the United States. In 1969 the federal population budget was $116 million, though in July 1969 President Nixon asked for $150 million for family planning and recommended the formation of a two-year National Study Commission. Tragically, President Nixon did not suggest steps to avert the catastrophic increase in population expected before the turn of the century, but only steps to accommodate the deluge.

Lord C. P. Snow and Dr. Andrei D. Sakharov have suggested herculean measures that will be necessary worldwide to cope with the current problems.[7] Solution of these problems will cost more than billions of dollars and will not avert the starvation deaths of hundreds of millions. Remember for each new birth there must be a death and, at this time, it will likely be a premature death.

Earlier I suggested that the biological sciences have knowledge to offer which might benefit us. We know that "Rapid growth is regarded as an indication of health, cessation of growth as an indication of stagnation or decay. But this is not the lesson which biology teaches. Reference to the life history of almost every organism including man shows us that the most important functions are performed after growth ceases. If the biological analogy suggests anything it is that the stabilized condition of a mature community, having a stationary population, should be more favorable to higher human activities than the adolescent period of rapid growth."[8]

If what we want is more knowledge and more culture, more fair play and more real happiness, not more business or more people, what are we going to do about it?

"Our institutions are not designed to help develop the good life but rather to make human beings more productive and more efficient tools of industry and commerce. Scientific technology is taking modern civilization on a course—suicidal —if not reversed in time."[9]

"It would require a geological epoch to heal some of the worst scars which man has already inflicted upon the face of the earth, while an infinite future will never restore a single lost species. The forces of destruction are at present increasingly active," and, though they meet with increasing opposition, positive results have been small. "The mass of the people are indifferent, do not understand the issues—or have settled down into a state of hopeless resignation."[10]

Conservation of Man

America as well as the world is largely unaware, indifferent, resigned. But I am not, and I hope you are not. We will stand or fall as education, formal and informal, succeeds or fails in getting across the message I am trying to deliver here. Up to now our failures dwarf our successes. Let's change that.

I ask you individually and as a group to spread the word to your friends, your school boards, your teachers, your children, your community, your legislators, your governor, and your president. Finance teachers of ecology and conservation and the integration of population education into each course in your schools. Advertise in newspapers and periodicals. Support family planning and especially family limitations. Be critical of advertising promoting on increased consumption of goods, power, or transportation. Be slow to vote for financing of additional water supplies and road improvements—to bring more people, more business. Promote scientific investigation to reveal the actual effects of population growth upon all phases of human welfare and work to have the findings incorporated in public policies. We must begin to live in harmony with our environment; we must learn how to recycle everything for everything must go somewhere. We must halt the destruction of our land which we have used in the past as though it were a commodity. It is a national and international resource and must be husbanded along with our minerals which now grow scarce. We must learn a new life style if we are to continue with a life of quality and variety. Our task is to produce less but spread our products over a larger population.

Groundswell of Discontent

The alterations in my environment, the degradation of nature around me and the limitations put on my enjoyment of nature have passed the threshold of my tolerance. I am not alone. There is a great groundswell of discontent evident in so much of what I hear and see and read. Many of our youth see no future and some are copping out. Many protest and some violently. They believe the conventional wisdom no longer applies and that new thinking is necessary; they do not believe that we should be doing better what we are already doing.

Here in America we prate of setting limits for our children but we set no limits for ourselves. We worship growth and expansion apparently unaware that this will inevitably end in racial suicide at best or in cataclysmic dislocations in the quality of life at worst. To continue to build schools, roads and other public works for an expanding population solves no problem. It only prolongs the unsuccessful attempt to catch up and tacitly encourages the onslaught of a larger population and further destruction of the environment. Setting limits on our numbers will not solve all our problems but it is a necessary beginning. Only when families are limited to one or two children will population trends be reversed in an orderly manner.

Can we accomplish population stabilization by popular consensus and voluntarily? If not, then we must do it some other way or find out later that nature bats last. The "tragedy of the commons" consists in the fact that each of us tends to exploit our biosphere, our living space, by having an extra child or a higher standard of "hav-

ing" things on the theory that the personal benefit far outweighs our minute share of the environmental cost. Unfortunately when 200 million or 3.5 billion others are doing the same thing the minute shares add up to a markedly lower quality of life. Perhaps it will require a political decision but sooner or later the population must stabilize. The resolution of the problem will require social and political action on a broad front. Perhaps we must make a value judgment as to whether having is more important than being or becoming. In our country we give lip service to being and becoming and to the product itself but we act as though having is all important and labels such as democratic, socialistic and communistic are crucial.

Some of the lights already have gone out, some are flickering. Will enough people see and take action?

We must seek a destination and we must recognize that there is no destination of value on the plane where we now are. We are on the wrong level. This one is polluted by man, it is polluted with people, tainted with war, burdened by overpopulation and permeated by man's inhumanity to man. We are in a time of revolutionary change. We must face that fact and design purposefully and peacefully—"humane and reasoned"—revolutionary solutions because they are right.

We must begin to think and work at conservation, not just conservation of the streams and trees and birds—but conservation of man himself. The conservation of man where it intersects the brotherhood of men—that must be our destination.

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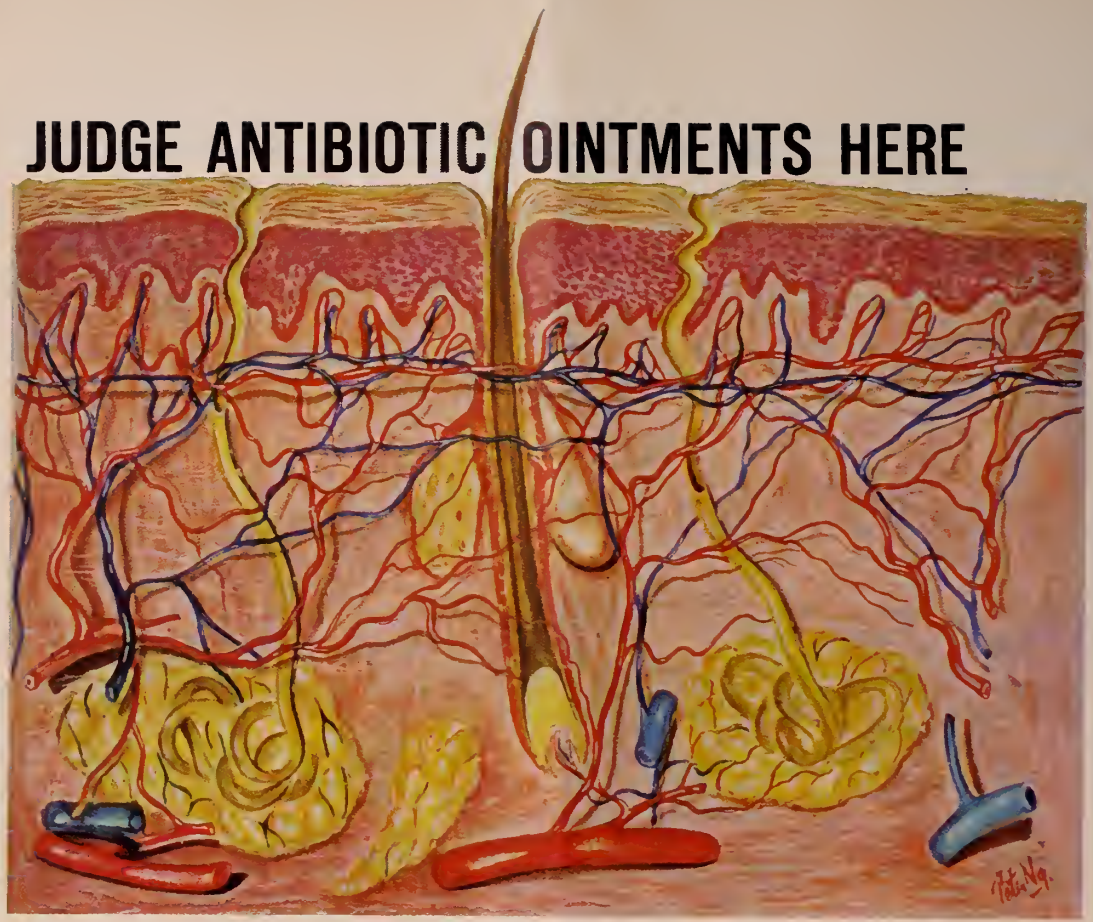
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No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.



The pain of arthritis

relieved with MEASURIN® q. 8h. dosage

Double-strength Measurin timed-release aspirin offers a new kind of control for your arthritic patients. Each 10-grain tablet has over 6,000 microscopic reservoirs that release aspirin at a controlled rate—some right away and some later on. This means—fast relief, followed by long lasting relief. Throughout the day, Measurin gives your patients freedom from a 4-hour dosage schedule. Measurin can help your patients get a good night's sleep, uninterrupted by the need for an extra dose of aspirin. And, taken at bedtime, it also helps ease morning joint discomfort and stiffness.

For Professional Samples write:
Breon Laboratories Inc.
Sample Fulfillment Division
P.O. Box 141
Fairview, N.J. 07022

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Subsidiary of Sterling Drug Inc.

MEASURIN
TIMED-RELEASE ASPIRIN
ECONOMICAL • EFFECTIVE • LONG LASTING PAIN RELIEF
Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief and to help relieve early morning stiffness, 2 tablets at bedtime.
Available: Bottles of 12, 36 and 60 tablets.

His makeup is unique by tradition.

His ulcer treatment is unique by tradition, too.

In the world of entertainment, a clown's makeup remains the exclusive property of its originator. Time has established that tradition. In the treatment of ulcers and other gastrointestinal complaints, time has established Pro-Banthine as a tradition too.

Few drugs can boast a longer successful run. Introduced 17 years ago, this drug is a veteran gastrointestinal performer.

Pro-Banthine stars in the treatment of peptic ulcer, functional gastrointestinal disturbances, ulcerative colitis, hypertrophic gastritis, pylorospasm, acute and chronic pancreatitis, diverticulitis, biliary dyskinesia, hyperhidrosis, ileostomies, and colonic, ureteral or urinary bladder spasm. Its fame as an anticholinergic is worldwide.

When you want a performer you can count on . . . remember Pro-Banthine. Tradition does.

SEARLE Research in the service of medicine.
G. D. Searle & Co., Chicago, Ill. 60680

Pro·Banthine®
(propantheline bromide)

the traditional ulcer treatment



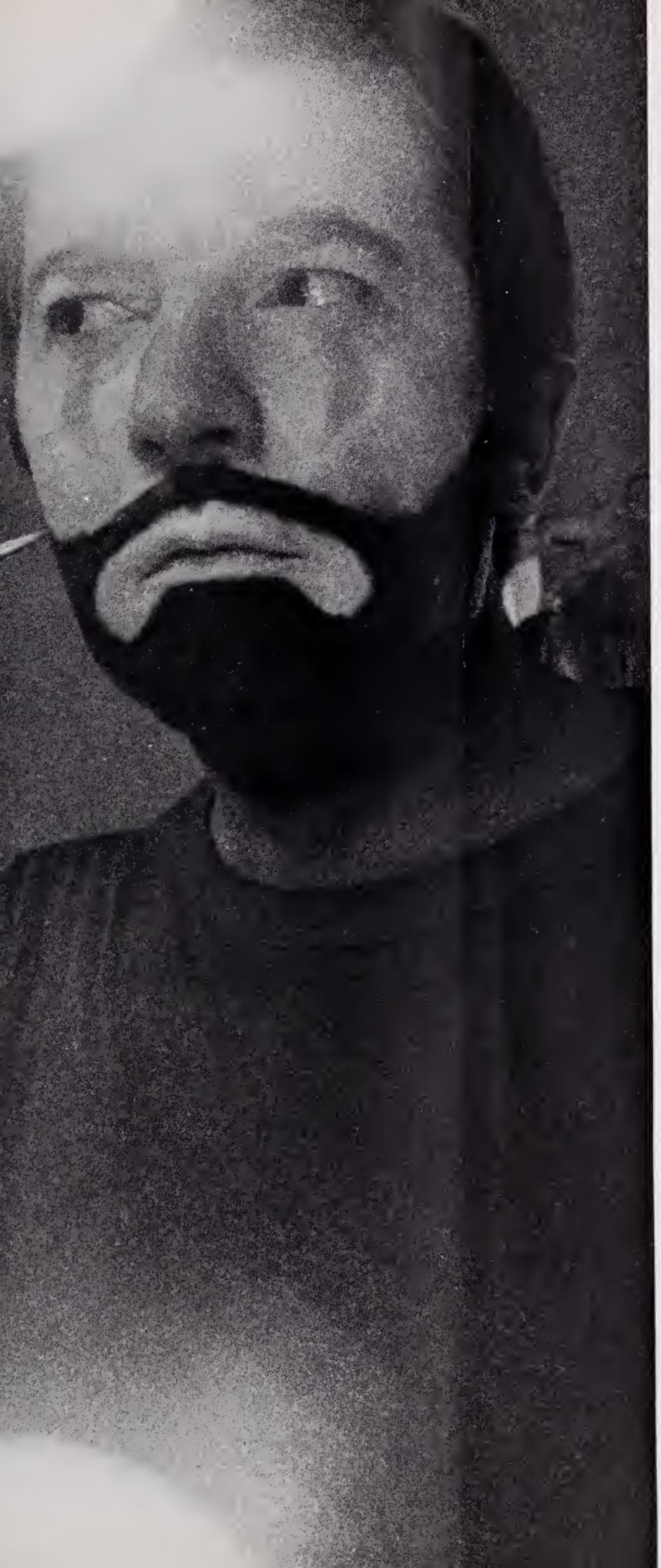
Pro-Banthine 15 mg. propantheline bromide

Pro-Banthine 15 mg. propantheline bromide with Dartal 5 mg. thiopropazate dihydrochloride

Pro-Banthine 15 mg. propantheline bromide with Phenobarbital 15 mg. warning: may be habit forming

Pro-Banthine P.A. 30 mg. propantheline bromide in time-release form

Pro-Banthine 7½ mg. propantheline bromide Half Strength



Pro·Banthine®
(propantheline bromide)

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.

Contraindications: Glaucoma, severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthine is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Pro-Banthine® 15 mg.
(propantheline bromide)
with
Dartal® 5 mg.
(thiopropazate dihydrochloride)

Indications: Peptic ulcer, spastic constipation, nonspecific gastritis, functional gastrointestinal disorders, pylorospasm, hyperhidrosis, irritable bowel syndrome, mucous or ulcerative colitis, functional diarrhea.

Contraindications: Glaucoma, severe cardiac disease.

Warnings: Pro-Banthine with Dartal should not be administered to patients who are under the influence of barbiturates, alcohol or narcotics. The drug should be administered cautiously to epileptic patients or those in depressed states, patients with liver disease and to pregnant women. Hypersensitivity to Dartal may occur rarely in patients with known sensitivity to similar drugs.

Side Effects: Dryness of the mouth, mydriasis, hesitancy of urination; less commonly extrapyramidal (restlessness, dystonia and signs of pseudoparkinsonism such as muscular rigidity, fixed facies, tremor, ataxia, festinant gait and drooling), parasympatholytic (blurred vision, xerostomia, hypotension, nasal congestion and constipation) and curare-like (loss of control of voluntary muscles, particularly the muscles of respiration) reactions. Rarely, leukopenia or allergic purpura. A generalized erythematous skin reaction may occur. Side effects characteristic of phenothiazines such as grand mal convulsions, altered cerebrospinal proteins, cerebral edema, potentiation of the effects of atropine, heat or phosphorus insecticides, autonomic reactions, endocrine disturbances, reversed epinephrine effect, hyperpyrexia or pigmentary retinopathy may theoretically occur but have not been reported with Dartal. Severe hypotension following recommended doses occurs more commonly in patients who are also afflicted by other medical disorders such as mitral insufficiency or pheochromocytoma, and particular attention should be paid to such a possibility although this has not been observed with Dartal.

Adult Dosage: One tablet three times a day.

Pro-Banthine® 15 mg.
(propantheline bromide)
with
Phenobarbital 15 mg.

Warning: May be habit-forming.

For *Indications, Contraindications, Precautions, Side Effects* and *Dosage* see Pro-Banthine. In addition, phenobarbital should be administered with caution to patients with liver disease, mental disturbances or a significant degree of hypoxia.

Pro-Banthine P.A.®
prolonged acting brand of propantheline bromide

For *Indications, Contraindications, Precautions* and *Side Effects* see Pro-Banthine.

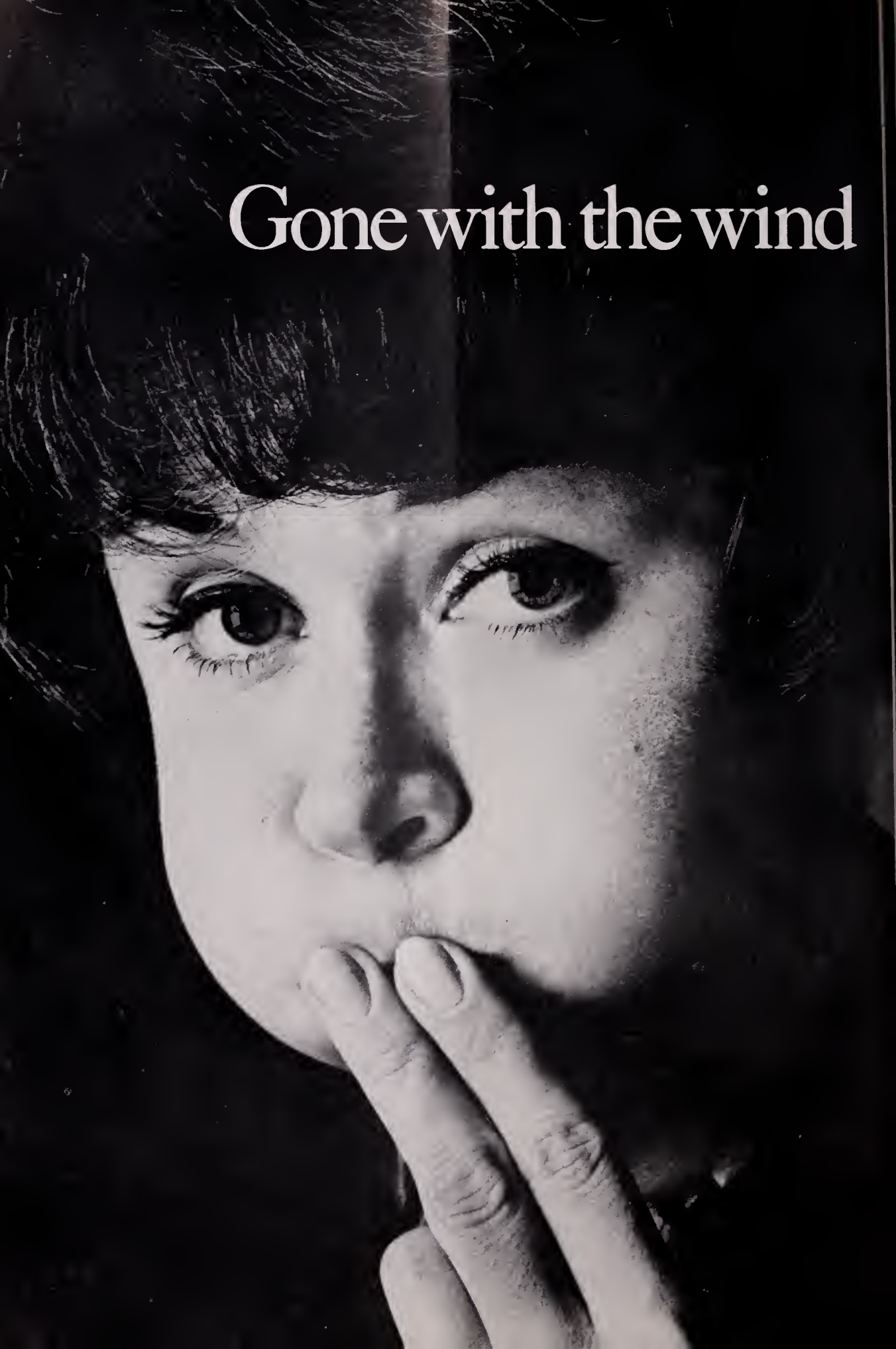
Dosage Form: Capsule-shaped, compression-coated, peach tablets of 30 mg. for oral use.

Dosage: The recommended initial dosage is one tablet in the morning and one at night.

084

SEARLE

Research in the service of medicine.
G. D. Searle & Co., Chicago, Ill. 60680


Gone with the wind

The gas/acid group of disorders

"The two most common complaints referable to the upper gastrointestinal tract for which patients seek medical relief are hyperacidity and 'gas.' The two often occur together."*

Frees captured gas...neutralizes free acid

SILAIN-GEL Tablets and Liquid are separate formulas designed to provide equivalent dual-action symptomatic relief. Both dosage forms contain simethicone which effectively frees trapped gas, enabling the patient to eliminate it. Magnesium hydroxide in both assures a rapid rise in pH for prompt relief of hyperacidity. The special co-dried aluminum hydroxide/magnesium carbonate gel in the tablets assures the same rapid and uniform reaction rate as the liquid. Thus, both medications achieve prompt and prolonged neutralization of free acid *plus* prompt relief from the pain and pressure of trapped gas.

Always in good taste

The pleasant, distinctive flavor of SILAIN-GEL, as well as its non-constipating feature, make it a therapy your patients can live with—in comfort and without complaint.

Select the form of SILAIN-GEL you want to provide symptomatic relief in: gastric ulcer • duodenal ulcer • heartburn • gastric hyperacidity • gastritis • dyspepsia

when the patient prefers the convenience of a tablet, select
Silain-Gel® Tablets:

when the patient prefers a liquid, select
Silain-Gel® Liquid

Also available for the patient who needs an antiflatulent agent only: **Silain®** (simethicone) Tablets

*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

Announcing the "Antgasid"

Silain-Gel®

Tablets: simethicone plus aluminum hydroxide/magnesium carbonate co-dried gel and magnesium hydroxide
Liquid: simethicone plus aluminum hydroxide and magnesium hydroxide
one dose does both: frees captured gas...neutralizes free acid

A·H·ROBINS A.H. Robins Company, Richmond, Virginia 23220



Drip stopped, Congestion cleared

For upper respiratory allergies and infections, up to 12 hours clear breathing on one tablet. Dimetapp Extentabs® does an outstanding job of helping to clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely.

INDICATIONS: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, rhinitis, conjunctivitis, and otitis. CONTRAINDICATIONS: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. PRECAUTIONS: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. SIDE EFFECTS: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered. DOSAGE: 1 Extentab morning and evening. SUPPLIED: Bottles of 100 and 500.

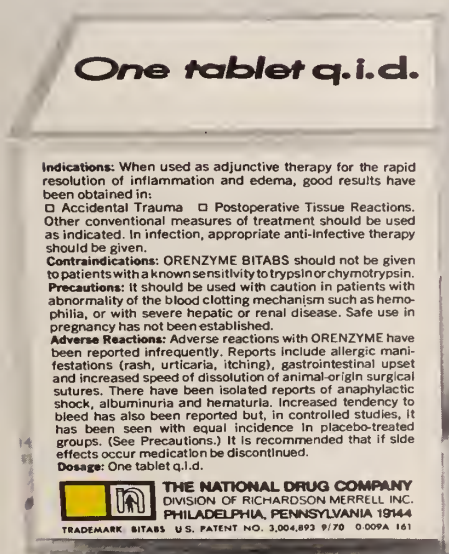
A·H·ROBINS
A. H. Robins Company
Richmond, Va. 23220

Dimetapp® Extentabs

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

A
BUILDING BLOCK
TO RECOVERY





Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

The causes of vaginitis are multiple



Trichomonads... monilia... bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (aminacrine hydrachlaride 0.2%, sulfanilamide 15.0%, allantain 2.0%)

Suppositories (aminacrine hydrachlaride 0.014 Gm., sulfanilamide 1.05 Gm., allantain 0.14 Gm.)

Contraindications: Known sensitivity to sulfanamides.
Precautions/Adverse Reactions: The usual precautions for topical and systemic sulfonamides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream – Four-ounce tube with or without applicator. Suppositories – Box of 12 with applicator.

TRADEMARK: AVC AV-007A 7/70 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC
PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular



Are they too old to swing?

EACH TESTAND-B TABLET CONTAINS:

Ethinyl Estradiol	0.005 mg.
Methyltestosterone	1.25 mg.
L-lysine	100 mg.
Ferrous Nicotinate	17.85 mg.
Equivalent to Nicotinic Acid	12.5 mg.
Ferrous Iron	2.82 mg.
Vitamin A	2,500 U.S.P. Units
Vitamin D	250 U.S.P. Units
Thiamine Mononitrate	2.5 mg.
Riboflavin	2.5 mg.
Ascorbic Acid	25.0 mg.
Folic Acid	0.125 mg.
Vitamin B-12	1.5 mcg.
Methionine	12 mg.
Choline Bitartrate	15 mg.
Inositol	10 mg.
Calcium Pantothenate	2.5 mg.
Pyridoxine	0.25 mg.
Copper (from Copper Sulfate)	0.25 mg.
Zinc (from Zinc Oxide)	0.25 mg.
Iodine (from Potassium Iodide)	0.25 mg.
Calcium (from Dicalcium Phosphate)	72.5 mg.
Phosphorus (from Dicalcium Phosphate)	55 mg.
Potassium (from Potassium Sulfate)	2.5 mg.
Manganese (from Manganese Sulfate)	0.5 mg.
Magnesium (from Magnesium Sulfate)	0.5 mg.

As the "middle years" exact their metabolic toll, complaints are vague, but therapy can be specific. Testand-B, as an anabolic stimulant in male and female climacteric, senile vaginitis, decreased muscle tone, protein depletion states, osteoporosis and loss of body mass, helps compensate for the metabolic changes of aging. The androgen/estrogen combination, plus the comprehensive nutritional complex provided by Testand-B, helps patients feel better physically and emotionally.

ACTION AND USES—*DOSAGE:* 1 tablet after breakfast and supper, or as required. In females, 3-week courses of therapy are recommended followed by a 1-week rest period. Withdrawal bleeding may occur during the rest period. *PRECAUTIONS:* Administer cautiously to female patients who tend to develop excessive hair growth or other signs of masculinization. *CONTRAINDICATIONS:* Patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast, genital tract, or prostate, and in patients with a familial tendency to these types of malignancy. *AVAILABLE:* Bottles of 30, 100, and 500 tablets.

Testand-B tablets

A hormonal, nutritional supplement

Geriatric Pharmaceutical Corp.
Floral Park, New York 11001
Pioneers in Geriatric Research

Survival of the fittest



After 30 years most drugs are obsolete. Only a select few survive. Take, for example, Butisol Sodium® (sodium butabarbital).

The discoveries of the past few decades have volutionized pharmacology. Not least the treatent of anxiety. Yet in the face of pyramiding anges, BUTISOL Sodium consistently remains mong the 100 medications most frequently preribed—clear evidence of physicians' continued liance on its relaxing sedative effect.

But perhaps that should come as no surprise.

1. BUTISOL Sodium is highly predictable: inor dosage adjustments are usually all that's eeded to produce the desired degree of relaxaon. (With 3 dosage forms and 4 strengths to ake adjustments easy.)

2. Its action is prompt, smooth, relatively oncumulative: BUTISOL Sodium begins to work thin 30 minutes...yet, because of its intermeate rate of metabolism, there is generally ither a "roller-coaster" nor a "hangover" effect.

3. It is remarkably well tolerated.

4. It saves your patients money: costs less an half as much as they would pay for most mmonly used sedative tranquilizers.*

It is advantages like these that lead thousands of physicians, year after year, to depend on BUTISOL Sodium for many of their clinical needs: to help the usually well-adjusted patient cope with temporary stress...or to relieve anxiety associated with hypertension, coronary disorders, premenstrual tension, surgical procedures, functional GI disorders, and the stresses of aging.

And that's a range of applications not likely to go out of date either.

*Based an surveys af average daily prescriptian casts.

Contraindications: Parphyria ar sensitivity ta barbiturotes.

Precautions: Exercise cautian in maderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement ar depression.

Adverse Reactions: Drawsiness at daytime sedative dose levels, skin rashes, "hangover" and systemic disturbances are seldom seen.

Warning: May be habit farming.

Usual Adult Dosage: For daytime sedation, 15 mg. ta 30 mg. t.i.d. ar q.i.d. For hypnasis, 50 mg. ta 100 mg. Available as: Tablets, 15 mg., 30 mg., 50 mg., 100 mg.; Elixir, 30 mg. per 5 cc. (alcahal 7%). BUTICAPS® [Capsules BUTISOL Sadium (sadium butabarbital)] 15 mg., 30 mg., 50 mg., 100 mg.

the Rx that says "Relax"

Butisol SODIUM®
(SODIUM BUTABARBITAL)

McNEIL

McNeil Laboratories, Inc., Fort Washington, Pa. 19034



Editorial

Pollution's Many Faces

Staring loathsomely at my stack of delinquent hospital charts and doubting the worth or reason for completing them solely for the purpose of accreditation, there came to mind an editorial on paper pollution in which is described reams of medical records lying tier upon tier in hospital after hospital where, day by day, physicians toil to maintain a constant flow. And to what end? So that the profession can sink deeper and deeper into a morass of medical documentation. Hospital chimneys could intervene to reduce the storage of medical records but paper, soot and ink spreading across the sky would incite officers to rush to the scene with warrants for violations of some new antipollution law. Instead of composing two pages of flawless rhetoric on an evanescent episode of *Tourista Trots,* such paper putrescence could be stopped by reducing the size of medical records, omitting unnecessary tables, graphs and charts and simply stating the true quality of medical care. If, on the other hand, this ecological problem is in one's own office and one's desk is a disheveled, disorderly pigsty of paper, one trickle of the inundation could be turned off by writing to the circulation department of the AMA and requesting that your name be placed on the "no promotional mail" list.

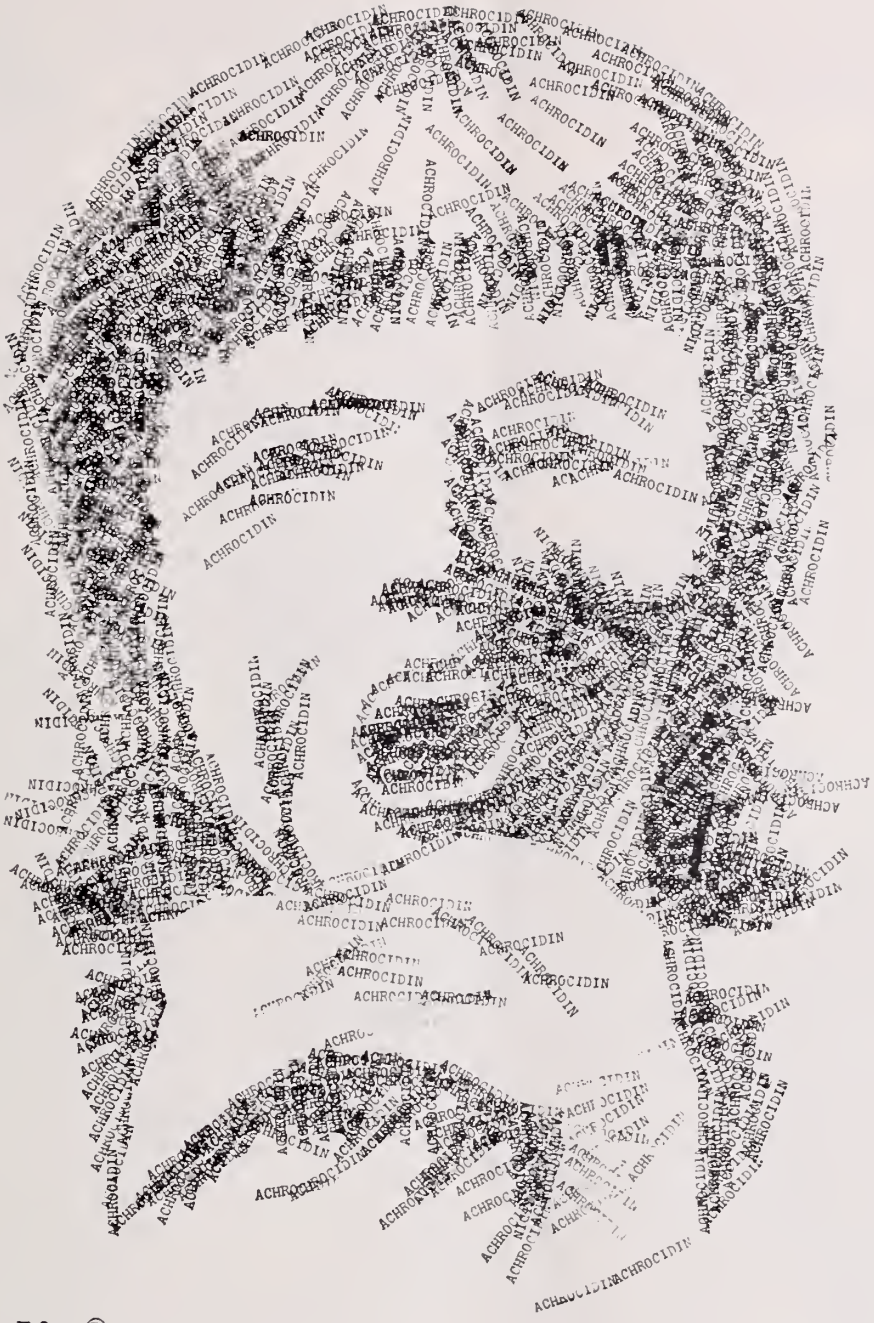
At its annual meeting last May, the House of Delegates of the Florida Medical Association called for legislative action on air and water pollution and recognized environmental dangers of toxic pesticides which prompted one delegate to mumble, "Yea, verily, the atmosphere around us doth contain many of the ills man is aired to." But perhaps, the time may be not far off when garbage can be rocketed out into space, to be disposed of by people on some other planet. Yet since no self-respecting town, however poor, remote or little wants to take in city garbage, the same principle may apply to neighboring planets. Still, the sun might make an ideal incinerator.

Recently someone proved that ASA is a medical pollutant, so it's likely that just treating a headache could be hazardous to your health. Noise, too, can be a pollutant as dangerous as any other but it fails to stir our youth who point out that you can always get rid of it by turning up the high-fi. Actually, the crux of the ecological crisis may be simply put: "Man, the thinker, began to tinker, the stinker."

Seriously, the world environmental crisis is sufficiently worrisome to make bed fellows of men normally divided by the deepest political differences. This was vividly demonstrated recently at the Fifth International Water Pollution Research Conference where 1,200 scientists and officials from communistic and capitalistic countries with countenances of yellow, black and white mingled freely to exchange ideas and experiences. Dramatic proof of the delegates' determination to keep politics out of their work came when an effort was made to change the location of the next conference, originally scheduled for Israel in 1972. Delegates from the communist block joined with an overwhelming majority to defeat the resolution to change the site.

We are indebted to Dr. Robert B. Ragland and his colleagues for this timely, interesting and challenging issue of the Journal.

C.M.C.



Achrocidin® Tablets and Syrup

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen Citrate 25 mg.

ACHROCIDIN Tetracycline HCl—Antihistamine—Analgesic Compound Tablets and Syrup are recommended for the treatment of tetracycline-sensitive bacterial infection which may complicate vasomotor rhinitis, sinusitis and other allergic diseases of the upper respiratory tract, and for the concomitant symptomatic relief of headache and nasal congestion. For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN Tetracycline equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

Lederle LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York 10965 534-9


NEW ARMOUR
APPROACH
TO TREATING
HYPOTHYROIDISM
BALANCED
SYNTHETIC
THYROID
REPLACEMENT
THERAPY
COMBINES
COMPLETENESS
OF NATURAL
THYROID WITH
PREDICTABILITY
OF SYNTHETIC

NEW Thyrolar®

(LIOTRIX, ARMOUR) TABLETS

SODIUM LIOTHYRONINE (T_3) AND SODIUM LEVOTHYROXINE (T_4)

HYROLAR® COMPLETENESS . . .

rovides *both* thyroactive fractions, $_4$ (sodium levothyroxine) and T_3 odium liothyronine) in a 4:1 ratio hat simulates the effects of ndogenous thyroid secretion.

THYROLAR® PREDICTABILITY . . .

Pure and chemically precise for predictable results. Uniformly potent for a smooth response, comfortable adjustment to therapy.

4 POTENCIES

½	1	2	3
(Peach and White)	(Pink and White)	(Green and White)	(Yellow and White)

Armacoded for fast identification and patient safety.



EQUIVALENCY TABLE

New Thyrolar®	Approx. Equiv. in Desiccated Thyroid	Approx. Equiv. in Sodium Levothyroxine	Approx. Equiv. in Sodium Liothyronine
Thyrolar-½	½ gr.	0.05 mg.	12.5 mcg.
Thyrolar-1	1 gr.	0.1 mg.	25 mcg.
Thyrolar-2	2 gr.	0.2 mg.	50 mcg.
Thyrolar-3	3 gr.	0.3 mg.	75 mcg.

Each Thyrolar-1 contains 50 mcg. sodium levothyroxine and 12.5 mcg. sodium liothyronine.

COMPOSITION: Thyrolar® (Liotrix, Armour) tablets provide a combination of the synthetic active thyroid hormones, sodium levothyroxine (T_4) and sodium liothyronine (T_3), in a ratio of 4 to 1 by weight. Available in 4 potencies approximately equivalent in therapeutic effect to ½ gr., 1 gr., 2 gr. or 3 gr. desiccated thyroid. Each Thyrolar-1 contains 50 mcg. sodium levothyroxine and 12.5 mcg. sodium liothyronine.

CONTRAINDICATIONS: Thyrolar® administration is contraindicated in thyrotoxicosis and in acute myocardial infarction.

Thyrolar® is contraindicated in the presence of uncorrected adrenal insufficiency because it increases the tissue demands for adrenocortical hormones and may cause an acute adrenal crisis in such patients. (See Warnings)

WARNINGS: Thyrolar® should be used with caution in patients with cardiovascular disease, including hypertension. The development of chest pain or other aggravation of cardiovascular disease will require a decrease in dosage.

Injection of epinephrine in patients with coronary artery disease may precipitate an episode of coronary insufficiency. This may be enhanced in patients receiving thyroid preparations. Careful observation is required if catecholamines are administered to patients in this category. Thyrolar®-treated patients with concomitant coronary artery disease should be carefully observed during surgery since the possibility of precipitating cardiac arrhythmias may be greater in patients treated with thyroid hormones.

The institution of thyroid replacement therapy may potentiate anticoagulant effects with agents such as warfarin or bishydroxycoumarin and reduction of one-third in anticoagulant dosage should be undertaken upon initiation of Thyrolar® therapy. Subsequent anticoagulant dosage adjustment should be made on the basis of frequent prothrombin determinations.

In patients whose hypothyroidism is secondary to hypopituitarism, adrenal insufficiency will probably also be present. When the adrenal insufficiency and hypothyroidism coexist, the adrenal insufficiency should be corrected by corticosteroids before administering thyroid hormones.

PRECAUTIONS: Patients with hypothyroidism and especially myxedema are particularly sensitive to thyroid preparations so that treatment should begin with small doses and increments should be gradual. In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents. Conversely, decreasing the dose of thyroid hormone may possibly cause hypoglycemic reactions if the dosage of insulin or oral agents is not adjusted.

ADVERSE REACTIONS: Excessive dosage of thyroid medication may result in symptoms of hyperthyroidism. Since, however, the effects do not appear at once, the symptoms may not appear for 1 to 3 weeks after the dosage regimen is begun. The most common signs and symptoms of overdosage are weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat, fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute treatment at a lower dosage level.

In a few individuals who are euthyroid on Thyrolar®, headache may appear. Dosage should be decreased. If headache persists or the patient develops signs of hypothyroidism on the lower dosage, another thyroid preparation should be substituted.

DOSAGE: Generally, the initial adult dosage in untreated hypothyroid individuals is 1 tablet of Thyrolar-½ daily; increased in increments of 1 tablet of Thyrolar-½ every 1 or 2 weeks until patient is euthyroid. In children, increments in dosage should be made every 2 weeks. In patients previously rendered euthyroid with desiccated thyroid, sodium levothyroxine or sodium liothyronine, each Thyrolar-1 tablet will usually replace 1 grain of desiccated thyroid.

AVAILABLE: Bottles of 100 two-layered, compressed tablets in 4 potencies:

	Each Tablet Contains:		Armacode™ Markings	Approx. Equiv. in Desiccated Thyroid
	T_4*	T_3**		
Thyrolar-½	25 mcg.	6.25 mcg.	YD	½ gr.
Thyrolar-1	50 mcg.	12.5 mcg.	YE	1 gr.
Thyrolar-2	100 mcg.	25 mcg.	YF	2 gr.
Thyrolar-3	150 mcg.	37.5 mcg.	YH	3 gr.

*sodium levothyroxine **sodium liothyronine

Armour Pharmaceutical Company
Chicago, Illinois 60690

When you choose a tetracycline...

Your first concern: Integrity of product.

Effectiveness: ACHROMYCIN Tetracycline is a crystalline broad-spectrum antibiotic which provides effective therapeutic activity against susceptible microorganisms.

Contraindication: History of hypersensitivity to tetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. Some patients may develop a photodynamic reaction to natural or artificial sunlight. Those with a history of photosensitivity reactions should avoid direct exposure to sunlight while under treatment. Discontinue drug at first evidence of skin discomfort.

Precautions: Use may result in overgrowth of nonsusceptible organisms. Constant observation is essential. If new infections appear, take appropriate measures. Use of tetracycline during teeth development may cause discoloration of teeth.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculopapular and erythematous rashes (a case of exfoliative dermatitis has been reported); photosensitivity reaction, onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose-related. Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylaxis. In young infants, bulging fontanels have been reported following full therapeutic dosage. This symptom has dis-

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ıppeared rapidly when drug is discontinued. Teeth—dental staining yellow-brown) in children of mothers given tetracycline during he latter half of pregnancy, and in children given the drug during he neonatal period, infancy and early childhood. Enamel hypoplasia has been seen in a few children. Blood—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. Liver—cholestasis (rare), usually at high dosage. Tetracycline may form a stable calcium complex in bone-forming tissue. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy.

Average Adult Daily Dosage: One Gm. per day, in 4 divided doses of 250 mg. each. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products. Treatment of streptococcal infections should continue for 10 days, even though symptoms have subsided.

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ORGANIZATION

Doctor Needs in Florida
An Updated Report from the FMA Physician Placement Service

EUGENE L. NIXON

Florida for the first time has reached the point at which there are more physicians seeking locations than there are openings for them to fill.

This is the most significant finding in a new analysis of registrations with the Florida Medical Association's Physician Placement Service (see "Doctor Needs in Florida," J. Florida M.A., November 1969, page 877). As of September 1, 1970, there were 259 medical doctors registered with the service as actively seeking locations for practice in the state. This represents a 27 per cent increase over the figure for about a year ago. The number of medical opportunities registered, 224, is almost identical.

Detailed analysis of the physicians and openings registered reveals that the state's greatest current needs appear to be in the fields of general practice, otolaryngology, internal medicine and emergency room practice. A favorable trend, however, may be in the making in that the number of general practitioners registered is up 17 per cent over a year ago, while the number of opportunities in that field is approximately the same.

The number of opportunities for internists is significantly lower than a year ago, while the number of internists registered is greater, but this specialty still remains as one of those most needed. Among the internists registered, there is a noticeable increase in subspecialties. Ten such fields are listed among the 45 specialists registered in internal medicine.

As has been the case for a number of years, otolaryngology continues as a specialty in short supply. Judging by current placement service registrations, its formerly closely-related companion specialty of ophthalmology does not appear to be in great need in Florida (13 ophthalmologists and only eight openings), but in the experience of the placement service, few ophthalmologists have difficulty in finding suitable locations.

The most oversupplied specialties appear to be radiology, orthopedics, general surgery and urology, in that order, and to a lesser extent, psychiatry, obstetrics and gynecology, and anesthesiology. This represents little change from a year ago.

While physician needs are fairly evenly distributed throughout the state, the need for general practitioners (indeed, for physicians in general) appears most acute in rural inland areas, a situation which has existed and worsened steadily since the Second World War. An especially concentrated need for internists may be observed in heavily populated Dade, Broward and Palm Beach counties.

As might be expected, a significant number (77) of the physicians registered as seeking Florida locations is already in the state. The remainder is scattered throughout 34 other states and seven foreign countries. Leading states in registrants are New York (27), Illinois (18), Georgia (15), Pennsylvania (12), Maryland and Virginia (9 each), and California and Texas (7 each).

The FMA Physician Placement Service was established in the 1940's to help doctors returning from military service to resume civilian practice. It has grown with the years and now serves Association members, groups and clinics, hospitals, governmental agencies, business and industry, communities and others seeking the services of medical doctors. All services are without charge and information is kept confidential upon request.

Doctors knowing of physician needs or wishing to change their practice locations are invited to contact the Physician Placement Service at P. O. Box 2411, Jacksonville, Florida 32203, telephone (904)356-1571.

The following table shows registration by specialty with the placement service as of September 1, 1970.

Mr. Nixon is Director, Scientific and Medical Services Department, Florida Medical Association, Jacksonville.

Type of Practice	Physicians Seeking Locations	Opportunities in Florida
Allergy	0	3
Anesthesiology	5	1
Cardiology	2	0
Colon & Rectal Surgery	0	1
Dermatology	4	4
Emergency Room	1	8
General Practice	48	79
General Surgery	36	10
Governmental	—	5
Industrial	—	3
Internal Medicine		
General	29	36
Cardiology	6	3
Diabetes	0	1
Endocrinology	1	0
Gastroenterology	3	1
Geriatrics	1	1
Physical Medicine	1	0
Psychiatry	1	0
Pulmonary Disease	1	1
Pulmonary Dis./Allergy	1	0
Rheumatology	1	0
Neurology	5	2
Neurosurgery	1	2
Obstetrics & Gynecology	15	10
Occupational Medicine	1	0
Ophthalmology	13	8
Orthopedics	12	3
Otolaryngology	5	9
Pathology	3	3
Pediatrics	14	14
Pediatric Allergy	1	0
Physical Medicine & Rehabilitation	1	0
Plastic Surgery	0	1
Psychiatry	9	5
Public Health	1	0
Radiology	17	1
Thoracic Surgery	2	2
Urology	16	6
Miscellaneous	2	1
Totals	259	224

The Florida Medical Librarians will meet at the Health Center Library, University of Florida, Gainesville, Florida, on Friday, November 6. For early birds there will be a social get together the night before. Anyone who has the responsibility for a hospital or health sciences library is invited to attend. For further information write to Jeanette Sands, Secretary, Florida Medical Librarians, Health Center Library, Gainesville, Florida 32601.

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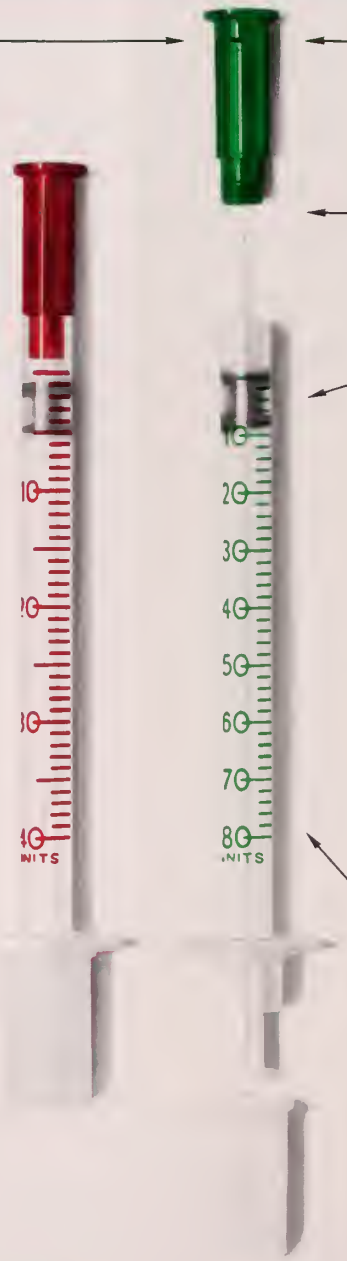
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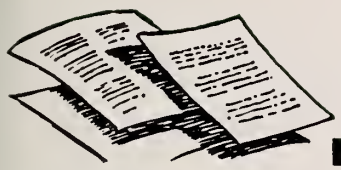
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Print



Letters

Franz H. Stewart, M.D.
Editor Emeritus
Journal of the FMA

Dear Dr. Stewart:

The House of Delegates in May 1970 approved a recommendation of the Council on Scientific Activities which reads as follows:

> "That the Association give its highest commendation to Dr. Franz H. Stewart and his staff for their outstanding efforts in producing and improving the Journal."

It is a real pleasure to transmit this commendation to you on behalf of the Association, and to add my personal thanks and best wishes.

James T. Cook, M.D.
President

James T. Cook, M.D., President
Florida Medical Association, Inc.

Dear Jim:

It is a good feeling to know that you are now President of our medical association. Your venturesomeness and your demonstrated ability to look through the massive detail and grab firmly at the basic fundamentals will serve you and us very well.

Thank you so much for sending me the letter telling that the House of Delegates in May were kind enough to praise the efforts of the staff of the Journal. It was a real privilege for me to work with these people.

Dr. Richard C. Dever was of such help while he was Chairman of Scientific Activities, that I am sending him a copy of the letter.

Franz H. Stewart, M.D.

Dear Dr. Collins:

Through the courtesy of Drs. John M. Gunsolus and John M. Powers of Stuart, I have just seen a copy of your August edition with cover by Jim Hutchinson and articles on the Seminoles by Drs. Straight and Mendez.

This is an invaluable contribution to knowledge of the Seminoles and I am reviewing it in my column of August 20. I will send you a copy.

Meanwhile, I would appreciate your sending me a copy for my Florida library since I must return the one loaned to me.

Ernest F. Lyons, Editor
The Stuart News
Stuart

Mr. Ernest F. Lyons, Editor
The Stuart News
Stuart, Florida

Dear Mr. Lyons:

Dr. Gunsolus has called to my attention your editorial of August 20, 1970, concerning the historical issue of the Journal of the Florida Medical Association. Your remarks are greatly appreciated concerning this issue.

Most of the credit for this issue of the Journal goes to the principal author, Dr. William M. Straight, of Miami, who I am certain will also appreciate your editorial.

We are pleased to forward you a complimentary copy of this issue of our Journal.

Clyde M. Collins, M.D.

Others Are Saying

Medicine of Seminoles is Issue Theme

Florida history buffs would be smart to send $1 to the Journal of the Florida Medical Association, P. O. Box 2411, Jacksonville, Fla. 32203, and request a copy of the August issue of the magazine. It sells for 70 cents and the extra 30 cents should cover postage.

My copy is "on loan" from Dr. John M. Gunsolus and Dr. John F. Powers, and they want it back, so I'm among the first to send my buck to Jacksonville.

The cover is a four-color painting of a Seminole Medicine Man preparing the Black Drinks for the annual Green Corn Dance in the Everglades. The realistic painting is by Jim Hutchinson, the nation's foremost painter of the Seminoles.

Jim has faithfully reconstructed the scene from the description of the Cow Creek Seminole Green Corn Dance by Louis Capron: "The Medicine Bundles of the Florida Seminole and the Green Corn Dance, Anthropological Paper 35, Bureau of American Ethnology Bulletin 151, 1953." The painting is authentic down to the last detail, one more of Hutchinson's priceless contributions to his lifetime goal of depicting the Seminoles as they really are.

Dr. William M. Straight, instructor in the History of Medicine at the University of Miami School of Medicine, contributes two deeply researched and sympathetic articles, "Seminole Indian Medicine," and "Josie Billie, Seminole Doctor, Medicine Man and Baptist Preacher."

While those treat with the "old medicine," Dr. Alfredo F. Mendez, who is director of the Indian Health Service for the State of Florida under the Department of Health, Education and Welfare of the U. S., writes of "Government Medical Service to the Seminole Indians," telling of clinics and the gradual acceptance of "the white man's medicine."

The old "doctors" of the Seminoles treated their patients with herbs and songs, but the "Medicine Man" held a higher role affecting the welfare of the entire tribe. He was in charge of the "Medicine Bundle," a collection of sacred objects only unveiled ritualistically at the ceremony of the Green Corn Dance. The significance of the Medicine Bundle to the Seminoles has been compared to the significance of the Ark of the Covenant to the Jews. It is believed to have a direct connection with the Great Spirit, and the Indians feel that its power to help the tribe will die if several years are allowed to pass without a Green Corn Dance.

Dr. Mendez writes: "For the last 10 years, more and more has been done toward a better relationship and communication between the Indians and the white doctor. The day of the Indian medicine man is fast disappearing. The people are getting more accustomed to the ways of white medicine and even the few medicine men left come to see the white doctor when they are sick."

This issue of the Journal of the Florida Medical Association is an invaluable contribution to Seminole history. We urge you to get a copy now—if you still can, since it will soon become a valued "Floridiana" item.

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Reprinted from Ernest Lyons' column, The Stuart News, Aug. 20, 1970.

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The wretch, concentrated all in self,
Living, shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust, from whence he sprung,
Unwept, unhonour'd, and unsung.

. . . . .The Lay of the Last Minstrel

Woman's Auxiliary



Woman's Auxiliary 1970 Fall Board Meeting and Conference

Mrs. Arnold J. Spanjers

The summer months have not been idle ones for the auxiliary president and her fall conference chairman. Plans have been completed and at the end of October, the 'Age of Aquarius' 1970 Fall Board Meeting and Conference will be a reality. New ideas and their implementation will be brought to county officers and chairmen by their state counterparts. Problems will be discussed, projects evaluated, and hopefully a smoother, more effective auxiliary year will evolve.

The two day, power-packed conference will begin with early registration on October 26th. That evening the Executive Committee will meet with Dr. James T. Cook, President of the Florida Medical Association, Mr. W. Harold Parham, Executive Vice President of the FMA, and Dr. Robert Williams, Chairman of the Advisory Committee to the Auxiliary.

The Board Meeting is scheduled for 9 a.m. Tuesday. Greetings will be brought from the national auxiliary by Mrs. Russell L. Deter. Mrs. Deter is currently chairman of the national auxiliary's Committee on Health Careers and has for a number of years been active on the national scene.

Luncheon featuring "Two New Auxiliary Stars"—Charlotte and Collier counties will have as dessert, Mrs. G. Edward Kappler, President, Woman's Auxiliary to the Student American Medical Association. Her husband, Captain Kappler, is a surgeon, now on duty with the Armed Forces in Viet Nam. During the year he is away, Robin hopes to put WA/SAMA on the map in all fifty states. At present, Florida does not have a WA/SAMA chapter.

The Tuesday afternoon session will be highlighted by Dr. Russell L. Deter of El Paso, Texas. "Teenagers are my hobby," says Dr. Deter, and he has worked with them for the past thirty years. His topic "Teenagers and Drugs" is in keeping with the FMA Auxiliary's number one project, Drug Abuse Education.

All work and no play could produce a dull auxiliary and the Polk County hostesses will not have it so. Winter Haven and especially Cypress Gardens are delighted to have the FMA Auxiliary and will welcome the group at a planned ski show and tour of the gardens. The Polk County Medical Association is hosting a poolside cocktail party, followed by dinner, with Dr. Joseph C. Von Thron speaking on "How to be a Good Doctor's Wife."

The Wednesday luncheon will be legislative in flavor and will feature Mr. Donald S. (Scotty) Fraser, Director, Public Affairs, FMA Capitol office. Legislation is of great interest to the women and they welcome the opportunity to discuss legislation pertinent to medicine. At this time they are informed of the role the auxiliary can play in legislative matters.

A portion of the conference eagerly looked forward to is the International Health Activities Bazaar. Last year over $600 was raised and sent to Care-Medico. All members are invited to contribute handcrafts, food, art works that in turn are sold to other members.

This fall meeting is usually well attended by the state and county officers and chairmen. It is a wonderful place to meet other doctors' wives from around the state and to promote those good relations among physicians' families. We welcome all our auxiliary members even though they hold no office or chairmanship. We hope that you will urge your wives to join us October 26-28, 1970, Sheraton-Cypress Gardens Motor Inn. It's a time to get together, a time to learn what's new, what's been tried and true, and what we need to know from you—our state and local medical societies.

Mrs. Spanjers, 1700 - 15th Street, N. W., Winter Haven 33880.

Mrs. Spanjers is president of the Woman's Auxiliary to the Florida Medical Association.

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ADVERSE REACTIONS: Similar to those reported wit either constituent alone.

Perphenazine: Should not be used indiscriminately. Us caution in patients who have previously exhibited sever reactions to other phenothiazines. Likelihood of untowar actions greater with high doses. Closely supervise wit any dosage. Side effects may be any of those reporte with phenothiazine drugs: extrapyramidal symptom (opisthotonos, oculogyric crisis, hyperreflexia, dystonia akathisia, dyskinesia, parkinsonism) usually controlled b the concomitant use of effective antiparkinsonian drug and/or by reduction in dosage, but sometimes persis after discontinuation of the phenothiazine; skin disorder (photosensitivity, itching, erythema, urticaria, eczema, u to exfoliative dermatitis); other allergic reactions (asthma laryngeal edema, angioneurotic edema, anaphylactoid re actions); peripheral edema; reversed epinephrine effect hyperglycemia; endocrine disturbances (lactation, galac torrhea, disturbances of menstrual cycle); altered cere brospinal fluid proteins; paradoxical excitement; EK(abnormalities (quinidine-like effect); reactivation of psy chotic processes; catatonic-like states; autonomic reac tions, such as dryness of the mouth, headache, nausea vomiting, constipation, obstipation, urinary frequency blurred vision, nasal congestion, and a change in the pulse rate; hypnotic effects; pigmentary retinopathy; cornea and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia. Other adverse reactions re ported with various phenothiazine compounds, but not with perphenazine, include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation. Significant unexplained rise in body temperature may suggest intolerance to perphenazine, in which case discontinue. Antiemetic effect may obscure signs of toxicity due to overdosage of other drugs or make diagnosis of other disorders such as brain tumors or intestinal obstruction difficult. May potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: Careful observation of all patients recommended. Side effects include drowsiness (may occur within the first few days of therapy); dizziness; nausea; excitement; hypertension; fainting; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; impotence; increased appetite and weight gain; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of latent schizophrenia (however, the perphenazine content may prevent this reaction in some cases); epileptiform seizures; temporary confusion, disturbed concentration, or transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of mouth, stomatitis, blurring of vision, reversible dilatation of the urinary tract, urinary retention, constipation, paralytic ileus; agranulocytosis; jaundice. Elderly patients and adolescents can often be managed on lower dosage levels.

For more detailed information, consult your MSD Representative or see the package circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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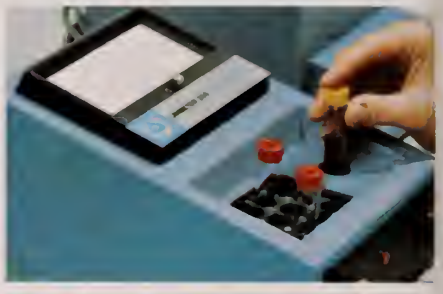
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Quinamm™
(quinine sulfate 260 mg , aminophylline 195 mg.)

Specific therapy for night leg cramps

0915A

MEETINGS

Approved by FMA Committee on Postgraduate Education

OCTOBER

16-17 Fourth Florida Industrial Health Conference, Palm Beach Towers, Palm Beach. For information: Joseph A. Baird, M.D., c/o American Cyanamid Co., Bradley, Fla. 33835.

NOVEMBER

2- 7 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D., c/o Heart Association, Box 10100, St. Petersburg 33733.

11-14 Today's Hospital Problems: An Interdisciplinary Approach—Fourth Annual Conference, Tides Hotel and Bath Club, Redington Beach. For information: M. A. Barton, M.D., Mound Park Hospital, St. Petersburg 33701.

13-14 ENT for the Family Practitioner, Sheraton Four-Ambassadors Hotel, Miami. For information: Frederic W. Pullen II, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

14 Ninth Annual Physician's Seminar on Respiratory Diseases, J. Hillis Miller Health Center, Gainesville. For information: Edward W. Swenson, M.D., P.O. Box 8127, Jacksonville 32211.

21-22 Joint meeting of American College of Physicians and the Florida Society of Internal Medicine, Langford Hotel, Winter Park. For information: A. M. Ziffer, M.D., 22 W. Lake Beauty Dr., Orlando 32806.

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville. For information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

30-Dec. 5 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D., c/o Heart Association, Box 10100, St. Petersburg 33733.

National and Regional Meetings Held in Florida

OCTOBER

25-28 American Clinical and Climatological Association, Ponte Vedra Club, Ponte Vedra. Sec.: J. Edwin Wood, M.D., Box 157, University of Virginia Hospital, Charlottesville, Va. 22901.

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

10-12 Cardiovascular Seminar on Coronary Disease, Sheraton Four Ambassadors Hotel, Miami. Pgm. Dir.: Mrs. Jo Baxter, 5080 Biscayne Blvd., Miami 33137.

1971

MARCH

1- 5 Society for Cryosurgery, Diplomat Hotel and Country Club, Hollywood. Sec.: Society for Cryosurgery, 30 N. Michigan Ave., Chicago 60602.

24-26 American Surgical Association, Boca Raton Hotel and Club, Boca Raton, Sec.: G. Thomas Shires, 5323 Harry Hines Blvd., Dallas 75235.

14-18 International Anesthesia Research Society, Americana Hotel, Miami Beach. Ex. Sec.: B. B. Sankey, M.D. 3645 Warrensville Center Rd., Cleveland 44122.

Book Review

Morris Fishbein, M.D., An Autobiography by Morris Fisbbein, M.D. Pp. 505. Price $10.00. 24 illustrations. New York, Doubleday & Company, Inc., 1969.

Morris Fishbein's autobiography is more than a personal memoir. While the hundreds of personal anecdotes that make up the book provide interesting and often amusing reading, there is woven through the story the history of the American Medical Association and organized medicine in the United States.

Although Dr. Fishbein never held a major elective office in that association, he was considered by most people to be its official voice, occasionally to the dismay of some of its elected officials. While never in practice himself, Dr. Fishbein fought long and hard for the preservation of the private practice of medicine. Less well known to the general public, but of comparable importance, was his involvement in the cause of improving and furthering medical education and the never ending fight against medical quackery.

While there are more comprehensive books about the history of twentieth century American medicine, none make for such enjoyable reading, or give such a warm, personal account of "the voice of the AMA."

LAWRENCE H. JACOBSON, M.D.
POMPANO BEACH

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

How to Live With Hypoglycemia by Cbarles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. New York, Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Gotb, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology edited by Hamisb Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., Tbe Celo Press, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

Cooking For Your Celiac Child by Cbarlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, Tbe Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army 1607-1939 by Stanbope Bayne-Jones, M.D. Pp. 255. Price $2.50. Wasbington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, Tbe C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, publisbed by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, publisbed by the U.S. Department of Healtb, Education and Welfare, Public Health Service, Wasbington, D.C., 1969.

Atlas of Human Electron Microscopy by Ruben P. Laguens and Cesar L.A. Gomez Dumm. Pp. 180. Illustrated. Price $20.50. St. Louis, The C. V. Mosby Company, 1969.

Infectious Diseases and General Medicine, Vol. III. Prepared and published under the direction of Lieut. General Leonard D. Heaton. The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969.

Personnel Administration and Labor Relations in Health Care Facilities by James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Mosby Company, 1969.

Davison's Compleat Pediatrician edited by Jay M. Arena, M.D. 9th ed. Pp. 792. Price $19.50. Philadelphia, Lea & Febiger, 1969.

Arrows of Mercy by Philip Smith. Pp. 244. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Tobacco and Your Health: The Smoking Controversy by Harold S. Diehl, M.D. Pp. 271. Illustrated. Price $2.95. New York, McGraw-Hill Book Company, 1969.

War Surgery by Camp H. M. Smith. Pp. 97. Department of Defense, Pacific Command, United States of America, 1969.

Synopsis of Obstetrics by Charles E. McLennan, M.D. and Eugene C. Sandberg, M.D. Pp. 496. 212 illustrations. Price $9.50. St. Louis, The C. V. Mosby Company, 1970.

The Adolescent Patient by William A. Daniel Jr., M.D. Pp. 444. 76 illustrations. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Spectroscopic Approaches to Biomolecular Conformation edited by D. W. Urry. Pp. 314. Illustrated. Price $15.00. Chicago, American Medical Association, 1970.

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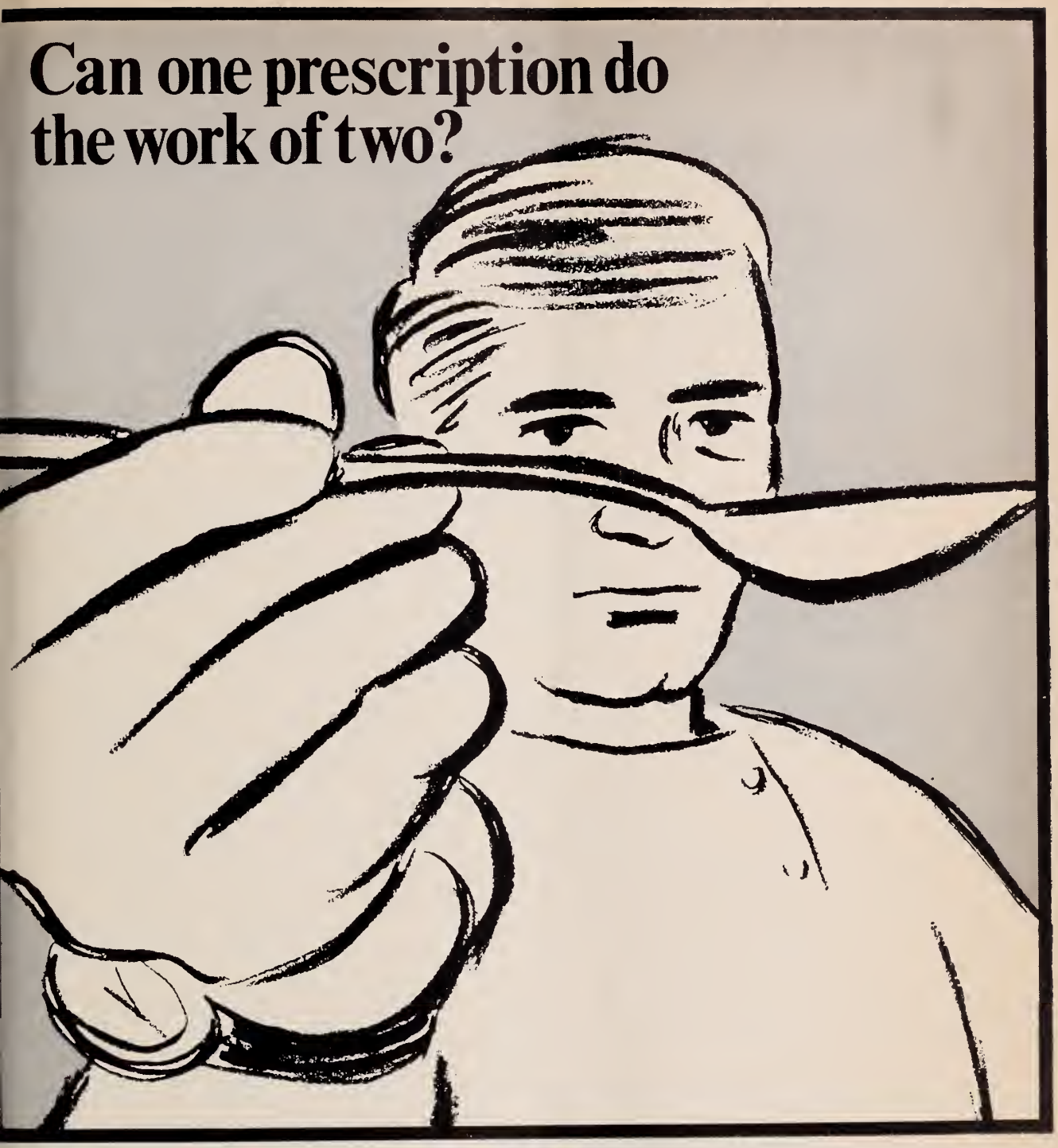
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(2) Samuel N. Workman, M.D.
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Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

SK&F

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DEATHS

Baker, Archie J., Jacksonville; born 1910; Tulane University, 1935; died September 6, 1970.

Batell, Leo, Tampa; born 1898; New York University, 1923; died March 25, 1970.

Bell, Alan E., Pensacola; born 1921; Johns Hopkins University, 1945; member AMA; died June 23, 1970.

Chunn, Charles F., Tampa; born 1912; Duke University, 1935; member AMA; died April 16, 1970.

Creekmore, George R., Brooksville; born 1879; University of Georgia, 1906; member AMA; died May 21, 1970.

Eldridge, Marion W., Blountstown; born 1891; Georgia Eclectic Medicine and Surgery, 1912; member AMA; died March 10, 1970.

Giles, Robert E., Jacksonville; born 1930; Medical College of Georgia, 1961; member AMA; died August 21, 1970.

Kirkpatrick, Charles Harry, Arcadia; born 1893; Tulane University, 1919; member AMA; died August 8, 1970.

Lapinsohn, Leonard I., South Miami; born 1919; Hahnemann University, 1945; member AMA; died April 22, 1970.

Lithgow, William D., Miami; born 1880; Temple University, 1908; member AMA; died June 14, 1970.

Mayer, Francis Ronald, Jacksonville; born 1937; University of Miami, 1965; died August 10, 1970.

Nichol, E. Sterling, Miami; born 1894; Northwestern University, 1924; member AMA; died June 24, 1970.

Packer, Marvin S., Miami Beach; born 1921; Chicago Medical School, 1950; member AMA; died April 8, 1970.

Parsons, Hugh Earle, Tampa; born 1908; Tulane University, 1936; member AMA; died July 24, 1970.

Peek, Eugene G. Sr., Ocala; born 1882; University of South Carolina, 1910; member AMA; died July 14, 1970.

Robinson, James E. Jr., West Palm Beach; born 1921; Washington University, 1944; member AMA; died June 6, 1970.

Schaeffer, Oden A., Miami; born 1907; Temple University, 1932; member AMA; died May 19, 1970.

Skaggs, Thomas Wayne, Miami; born 1920; University of Maryland, 1953; member AMA; died July 2, 1970.

Smith, Patrick H., Monticello; born 1899; Georgia University, 1924; died May 8, 1970.

Stebbins, Alvin Lloyd, Pensacola; born 1903; Emory University, 1928; died July 19, 1970.

White, Bradford C., Fernandina Beach; born 1929; Hahnemann Medical College, 1953; member AMA; died August 27, 1970.

Woodhouse, George A., Miami; born 1899; Cincinnati University, 1924; died April 21, 1970.

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Miscellaneous

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Florida Organizations of Medical Interest Meetings and Officers

Organization	President	Secretary	Annual Meetin
Florida Medical Association	James T. Cook, Marianna	James W. Walker, Jacksonville	Miami Beach, May 5-9, 1
Florida Specialty Societies			
Allergy Society	Meyer B. Marks, Miami Beach	Bernard M. Barrett, Pensacola	
Anesthesiologists, Soc. of	Miguel Figueroa Jr., Miami	George T. Edwards, Ft. Lauderdale	
Chest Phys., Am. Coll., Fla. Chap.	Richard A. Elias, Miami	Eugene J. Sayfie, Miami	
Dermatology, Society of	Julian J. Goodman, W. Palm B'ch	Hugh W. Johnson, Lakeland	
Gastroenterologic Society	James H. Johnson, Lakeland	James L. Borland Jr., Jack'ville	
General Practice, Academy	Leon S. Eisenman, Hialeah	Joseph P. Hendrix, Port St. Joe	
Internal Medicine	Robert L. Andreae, Ft. Lauderdale	Victor H. Knight Jr., Tampa	
Neurology, Florida Society of	Oscar M. Reinmuth, Miami	Jacob Green, Jacksonville	
Neurosurgical Society	F. Garcia-Bengochea, Gainesville	Robert S. Tolmach, Miami	
Obst. & Gynec. Society	Joseph W. Pilkington, St. Pet'sb'g	Charles A. Johnson Jr., Clearwater	
Ophthalmology Society	Harry F. Rolfes, St. Petersburg	Curtis D. Benton Jr., Ft. Lauderdale	
Orthopedic Society	Philip O. Lichtblau, W. Palm B'ch	Robert E. Ingersoll, Hollywood	
Otolaryngology Society	Richard T. Farrior, Tampa	John W. Stone, Lakeland	
Pathologists, Society of	Donald L. Howie, St. Petersburg	William R. Beach III, Orlando	
Pediatric Society	Thomas M. Brill, Gainesville	James M. Stem, Clearwater	
Pediatric Surgeons, Fla. Assn.	Albert H. Wilkinson Jr., J'ville	Luis F. Mencia, Miami	
Phys. Med. & Rehab., Fla. Soc.	Alan E. VanSant, Tampa	George A. Cunningham III, West Palm Beach	
Plastic & Reconstr. Surgery	Gilbert B. Snyder, Miami	William G. Taylor, Tampa	
Preventive Medicine, Fla. Soc.	E. Charlton Prather, Orange Park	Malcolm J. Ford, Jacksonville	
Proctologic Society	Thomas S. Gowin, Coral Gables	Manuel L. Carbonell, Miami	
Psychiatric Society	Lorant Forizs, Tarpon Springs	Merton L. Ekwall, Tallahassee	
Radiological Society	Wade S. Rizk, Jacksonville	William F. Lindsey, Tallahassee	
Surgeons, Am. Coll., Fla. Chap.	Harry W. Reinstine Jr., Jack'ville	David S. Hubbell, St. Petersburg	
Surgeons, Gen., Fla. Assn.	Clyde M. Collins Jr., Jacksonville	George H. Welch Jr., St. Petersburg	
Surgeons, Int. Coll., Fla. Chap.	John F. Lovejoy, Jacksonville	William L. Wagener Jr., Coral Gables	
Surgeons, Thoracic, Fla. Society	Carlos R. Lombardo, Miami	Thomas M. McNeill, Orlando	
Urological Society	Horace D. Atkinson, W. Palm B'ch	Clark A. Whitehorn, Panama City	
American Cancer Society, Div.	William F. Mahoney, M.D., Sarasota	Mrs. Peggy Lombardo, Jacksonville	Jacksonville, Oct., 1970
Arthritis Foundation, Chap.	Mr. William Namack III, Bradenton	Mrs. Barbara White, Bradenton	November 1970
Blood Banks, Association	Thomas C. Hartney, M.D., Tampa	Mrs. Alma Del Valle, Tampa	J'ville, Apr. 30-May 1-2, 1
Blue Shield of Florida, Inc.	Warren W. Quillian, M.D., Coral Gables	Henry J. Babers Jr., M.D., Gainesville	Miami Beach, May 5-9, 19
Board of Medical Examiners	Carl C. Mendoza, M.D., Jacksonville	J. Champneys Taylor, M.D., Jacksonville	Jacksonville, Jan. 17-19, 19
Crippled Children & Adults, Soc.	Thomas B. Abbott, Ph.D., Gainesville	Mr. Ray J. Worssm, Sarasota	Key West, Oct. 24, 1970
Diabetes Association	George P. Heffner, M.D., Ft. Lauderdale	Eugene T. Davidson, M.D., Lakeland	Ft. Lauderdale, Oct. 9-10,1
Fla. Industrial Medical Assn.	Thomas B. Thames, M.D., Orlando	Joseph A. Baird, M.D., Bradley	Palm Beach, Oct. 16-17, 19
Heart Association	Freeman H. Cary, M.D., Orlando	Mr. Silbur H. Shorts, Jacksonville	Orlando, May 23, 1971
Mental Health Assn. of Fla., Inc.	Dean Max G. Rieves, Ft. Myers	Rev. Warren Wall, Avon Park	Palm Beach, Oct. 1971
Prevention of Blindness, Soc.	Mr. John D. Crannell, Tampa	Miss Doris McCullough, Tampa	Tampa, Feb., 1971
Public Health Association	Mr. Miles T. Dean, Tallahassee	Mr. Embree A. Walker, J'ville	Clearwater, Oct. 8-10, 1970
Retarded Children, Association	Mrs. Theodore Norley, W.P.B.	Mr. Leonard Stafford, Pensacola	Orlando, Fall 1970
Thoracic Society	Edward W. Swenson, M.D., Gainesville	L. C. Manni, M.D., Jacksonville	Tampa, April 22-24, 1971
Tuberculosis & Res. Dis. Assn.	Mr. Jack C. Inman, Orlando	Mrs. Jeanne Malchon, St. Pete	Tampa, April 22-24, 1971
Woman's Auxiliary to FMA	Mrs. Arnold J. Spanjers, Winter Haven	Mrs. Lloyd K. Netto, W.P.B.	Miami Beach, May 5-9, 19

(Most Specialty Group meetings are scheduled at the time of the annual meeting of the Association)

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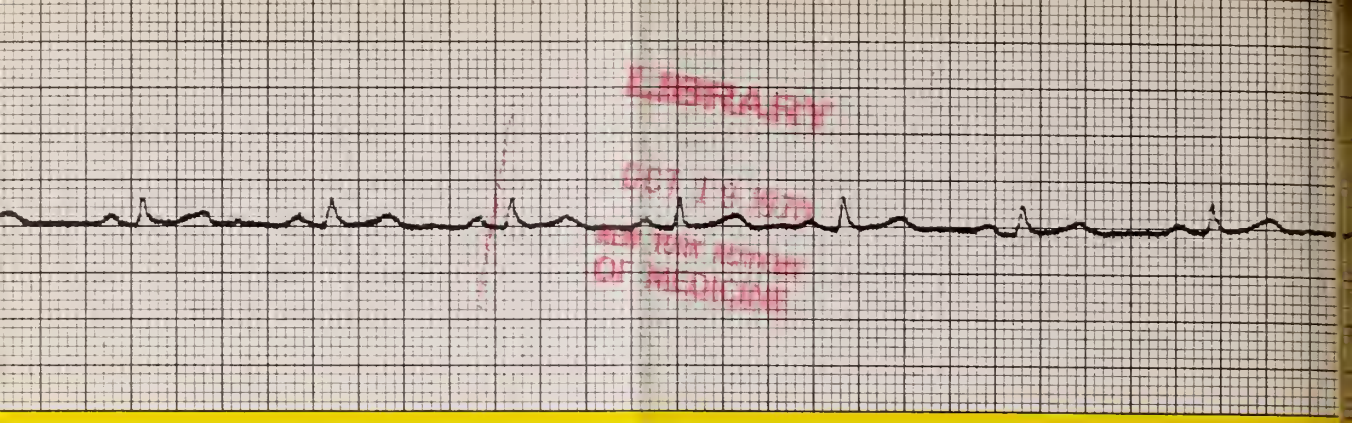
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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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NOVEMBER, 1970 • VOLUME 57 • NUMBER 11



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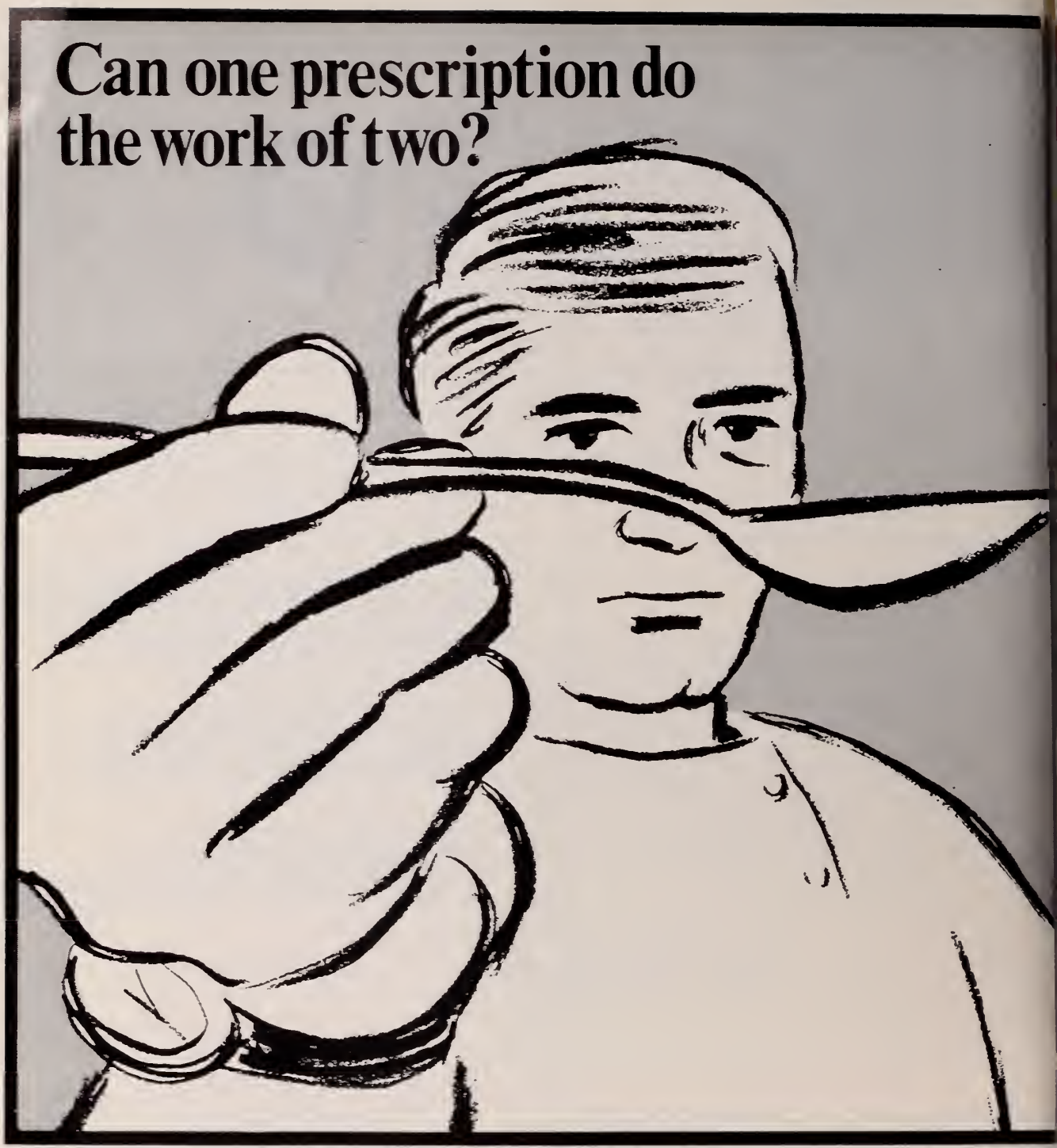
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Now a new 10% solution, Mucomyst-10, offers you the choice of prescribing a lesser concentration whenever you feel this is desirable. It provides added convenience and simplicity, particularly for your patients using nebulizing units at home.

By including Mucomyst-10 in the home management regimen, you can provide full mucolytic benefits for many of your patients with chronic bronchitis and emphysema complicated by tenacious secretions.

Indications: Mucomyst has been demonstrated to be clinically effective as adjuvant therapy in a wide range of conditions in which thick, viscous mucus is a problem, including: postoperative atelectasis and pneumonia; chronic bronchopulmonary disease (emphysema, chronic bronchitis, asthma, and bronchiectasis); acute bronchopulmonary disease (pneumonia, bronchitis, and tracheobronchitis); tracheostomy care; facilitation of bronchial studies; maintenance of an open airway during anesthesia; and to help control pulmonary complications of cystic fibrosis. **Contraindications:** Mucomyst is contraindicated in those patients who are sensitive or who have developed a sensitivity to it. **Warnings: After proper administration of acetylcysteine, an increased volume of liquefied bronchial secretions may occur. When cough is inadequate, the open airway must be maintained by mechanical suction if necessary. When there is a large mechanical block due to foreign body or local accumulation, the airway should be cleared by endotracheal aspiration, with or without bronchoscopy. Asthmatics under treatment with Mucomyst should be watched carefully. If bronchospasm progresses, this medication should be immediately discontinued. Adverse Effects:** Adverse effects have included stomatitis, nausea and rhinorrhea. Sensitivity and sensitization to Mucomyst have been reported very rarely. A few susceptible patients, particularly asthmatics (see **Warnings**), may experience varying degrees of bronchospasm associated with the administration of nebulized acetylcysteine. Most patients with bronchospasm are quickly relieved by the use of a bronchodilator given by nebulization. **Administration & Dosage:** Mucomyst may be administered by nebulization into a tent, Croupette, face mask, or mouthpiece; or by direct instillation. **Mucomyst should not be placed directly into the chamber of a heated (hot-pot) nebulizer.** Complete details on dosage, administration, and compatibility are included in the package insert. Additional information may be obtained from Mead Johnson Laboratories. **Supplied: Mucomyst-10 (acetylcysteine)**, a sterile 10% solution, in vials of 10 ml. and 30 ml.; **Mucomyst (acetylcysteine)**, a sterile 20% solution, in vials of 10 ml. and 30 ml.

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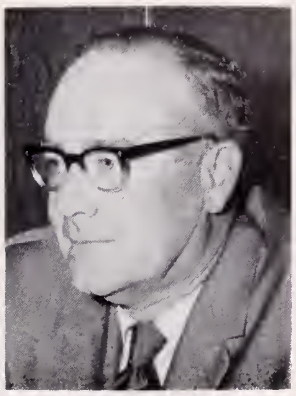
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In serving you, the Guild Optician also has a stake in the welfare of your patients; depend on his expert services and experience to be sure your patients are getting the best possible results from the prescriptions you write! *Guild of Prescription Opticians of Florida.*

USING GUILD SKILLS AND EXPERIENCE TO SERVE YOUR PATIENTS

President's Page



It's All Voluntary

We have just finished the fall meeting of the Board of Governors. Most council chairmen, all board members, all AMA delegates from Florida, and others were present. This has been one of the most stimulating experiences of my life; the depth of knowledge so many of our people have concerning so many facets of organized medicine is encouraging to say the least.

Florida Medicine has so many things going on that no one person can possibly be well versed in them all—not even Harold Parham. Your President is a GP in this field also; I know something about all we are doing but others usually know more about their particular field.

I could easily fill this page with information on any one of a dozen important things we discussed; let me mention only two.

First, we are deeply concerned that the Social Security Administration has revoked its previous agreement to pay doctors for Peer Review committee work, and to guarantee them immunity from legal action arising from their decisions. We all hope this can be changed; until then, I hesitate to ask any doctor to perform this arduous committee work. This is a serious matter, for I still believe only doctors are competent to do peer review on doctors.

Second, let me mention FLAMPAC—later I may use an entire page for this. We all know FLAMPAC has made mistakes in the past, and that it has rather loose organization. The latter is being tightened up, and although it, as any organization, will continue to make errors, they will be more rare. On the positive side, and far outweighing the negative, is the fact that this organization is becoming a real asset to us in the political field. Politicians want votes and the money for campaigns; FLAMPAC can offer both. Nothing can better change the trend to socialization than having its opponents in Congress and I think we are getting them; FLAMPAC and AMPAC are helping to accomplish this.

You have some fine, dedicated, able men working for you in Florida medicine. We can't agree on all things; there's no such group of doctors, but they are all well-versed and willing. No organization could hire such a Board; thank goodness, it's all voluntary.

James T. Holt, Jr., M.D.

Menrium® treats the menopausal symptoms that bother him most.



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His wife has a lot of different
enopausal symptoms, but only a few
ally irritate *him*. Her hot flashes, her
rtigo, her palpitations—that's *her*
oblem. What really bothers him is
r nervousness, her irritability and
r excessive anxiety, often expressed
endless "book-shuffling, chain-
noking, reading-lamp" insomnia!
Menrium takes care of hot flashes,
rtigo, palpitations in most
enopausal women. Menrium
ovides the well-known antianxiety
tion of chlordiazepoxide (Librium®)
d water-soluble esterified estrogens.
therefore relieves more symptoms
an either component separately.
takes care of the vasomotor
mptoms as well as the emotional
mptoms. This means the symptoms
at bother his wife most. And the
mptoms that irritate him most.
So, to help them both get through
r menopause, remember Menrium.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of manifestations generally associated with the menopausal syndrome—anxiety and tension, vasomotor complaints and hormonal deficiency states.

Contraindications: Women with cancer of breast or genitalia, except inoperable cases, and those with known hypersensitivity to chlordiazepoxide and/or esterified estrogens.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Exclude other possible causes of menopausal syndrome manifestations, such as pregnancy. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) similar to those seen with barbiturates have been reported following discontinuance of chlordiazepoxide HCl. Potential benefits of use in pregnancy, lactation or women of childbearing age should be weighed against possible hazards to mother and child. Clinical data inadequate on safety in pregnancy.

Precautions: In elderly and debilitated patients, limit dosage to smallest effective amount of chlordiazepoxide (initially 10 mg or less per day) to preclude ataxia or oversedation; increase gradually as needed and tolerated. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects—particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in patients with impaired renal or hepatic function. Paradoxical reactions to chlordiazepoxide (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in the treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation very rarely reported in patients receiving Librium® (chlordiazepoxide) and oral anticoagulants.

Adverse Reactions: Untoward effects seen with either compound alone may occur with Menrium. With chlordiazepoxide, drowsiness, ataxia and confusion reported in some patients, particularly in the elderly and debilitated; while usually avoided by proper dosage adjustment, these are occasionally observed at lower dosage ranges. Also reported have been a few instances of syncope; isolated occurrences of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido, and occasional reports of blood dyscrasias, including agranulocytosis, jaundice and hepatic dysfunction. Periodic blood counts and liver function tests advisable during protracted treatment. Changes in EEG patterns (low-voltage fast activity) observed during and after chlordiazepoxide treatment.

With estrogens, headache, nausea and vomiting, anorexia, gastrointestinal discomfort, dysuria and urinary frequency, jitteriness, breast engorgement, formation of breast cysts, skin rashes and pruritus occasionally seen. Administration may also be associated with uterine bleeding and/or followed by withdrawal bleeding.

Usual Dosage: One tablet t.i.d. for 21 days, followed by one-week rest periods.

Menrium® T.I.D.

5 mg chlordiazepoxide	5-2	0.2 mg water-soluble esterified estrogens
5 mg chlordiazepoxide	5-4	0.4 mg water-soluble esterified estrogens
10 mg chlordiazepoxide	10-4	0.4 mg water-soluble esterified estrogens


Gone with the wind

The gas/acid group of disorders

The two most common complaints referable to the upper gastrointestinal tract for which patients seek medical relief are hyperacidity and 'gas.' The two often occur together."*

Frees captured gas...neutralizes free acid

SILAIN-GEL Tablets and Liquid are separate formulas designed to provide equivalent dual-action symptomatic relief. Both dosage forms contain simethicone which effectively frees trapped gas, enabling the patient to eliminate it. Magnesium hydroxide in both assures a rapid rise in pH for prompt relief of hyperacidity. The special co-dried aluminum hydroxide/magnesium carbonate gel in the tablets assures the same rapid and uniform reaction rate as the liquid. Thus, both medications achieve prompt and prolonged neutralization of free acid *plus* prompt relief from the pain and pressure of trapped gas.

Always in good taste

The pleasant, distinctive flavor of SILAIN-GEL, as well as its non-constipating feature, make it a therapy your patients can live with—in comfort and without complaint.

Select the form of SILAIN-GEL you want to provide symptomatic relief in: gastric ulcer • duodenal ulcer • heartburn • gastric hyperacidity • gastritis • dyspepsia

when the patient prefers the convenience of a tablet, select
Silain-Gel® Tablets:

when the patient prefers a liquid, select
Silain-Gel® Liquid

Also available for the patient who needs an antifrothicant/antiflatulent agent only: **Silain®** (simethicone) Tablets

*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

Announcing the "Antgasid"

Silain-Gel®

Tablets: simethicone plus aluminum hydroxide/magnesium carbonate co-dried gel and magnesium hydroxide

Liquid: simethicone plus aluminum hydroxide and magnesium hydroxide

one dose does both: frees captured gas...neutralizes free acid

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Roche announces

Efudex®

(fluorouracil) cream/solution

for the treatment of solar/actinic keratoses... a topical alternative to conventional therapy

1/22/68—Treatment with 5% 5-FU cream commences. Patient K.L. showing widespread but mild solar keratoses (also known as actinic keratoses).



Fluorouracil—the Roche contribution

In 1962, Roche Laboratories introduced Fluorouracil Roche® (5-fluorouracil). Early clinical work with this drug suggested that it possessed a selective cytotoxic activity when applied topically to certain kinds of lesions. Based on this work and years of clinical trials, a standardized form of topical fluorouracil can now be recommended for treatment of multiple solar or actinic keratoses.

Efudex®(fluorouracil)—a new alternative to conventional therapy

Efudex presents the physician with a topical alternative to surgery in the treatment of solar or actinic keratoses. It is effective, comparatively inexpensive and especially well-suited for treatment of multiple lesions. Important, too, is the highly desirable cosmetic result. Clinical experience demonstrates that treatment with Efudex results in an extremely low incidence of scarring.*

Highly effective on first and later applications

In clinical trials, depending on the dosage form and strength used, complete involution occurred in 77 to 88 per cent of lesions following treatment. The rate of recurrence was low, ranging from 1.7 to 5.6 per cent up to a year after completion of therapy. When lesions did recur or new ones appeared, repeated courses of Efudex therapy proved effective.*

/'68—After 11 days of treatment.
hema is seen at site of keratoses. In
tion, numerous lesions not apparent
r to therapy have become manifest
harply defined reactions. Intervening
, also treated, shows no response to
apy.

9/69—One year after cessation of
rapy. Skin appears clear with no evi-
ce of scarring. Examination reveals
of recurrence or the formation of
v lesions.



Predictable sequence of therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of the keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two to three months before gradually receding.

Selective—with a high degree of safety

Despite the temporary unsightliness and discomfort of the inflammatory episode, Efudex is, in general, more readily tolerated than surgery. Clinical work shows the intense inflammatory response to be limited to the area of the lesion. Normal skin is not similarly affected. Another measure of Efudex safety: systemic absorption of topical fluorouracil was insignificant, indicating a low risk of systemic toxicity.*

Two strengths—two convenient dosage forms

Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, there are two important considerations. First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

2% and 5% Solutions; 5% Cream Applied twice daily—resolves solar or actinic keratoses.

new Efudex® (fluorouracil) cream/solution



For full prescribing information, please see the following page.

Roche introduces

Efudex®

(fluorouracil) cream/solution the new standardized topical for solar/actinic keratoses

Description: Efudex solutions and cream are topical preparations containing the fluorinated pyrimidine 5-fluorouracil, an antineoplastic antimetabolite.

Efudex Solution consists of 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris-(hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream contains 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

Actions: There is evidence that the metabolism of fluorouracil in the anabolic pathway blocks the methylation reaction of deoxyuridylic acid to thymidylic acid. In this fashion fluorouracil interferes with the synthesis of deoxyribonucleic acid (DNA) and to a lesser extent inhibits the formation of ribonucleic acid (RNA). Since DNA and RNA are essential for cell division and growth, the effect of fluorouracil may be to create a thymine deficiency which provokes unbalanced growth and death of the cell. The effects of DNA and RNA deprivation are most marked on those cells which grow more rapidly and which take up fluorouracil at a more rapid pace. The catabolic metabolism of fluorouracil results in degradative products (*e.g.*, CO_2, urea, α-fluoro-β-alanine) which are inactive.

Studies in man with topical application of ^{14}C-labeled Efudex demonstrated insignificant absorption as measured by ^{14}C content of plasma, urine and respiratory CO_2.

Indications: Efudex is recommended for the topical treatment of multiple actinic or solar keratoses.

Contraindications: Efudex is contraindicated in patients with known hypersensitivity to any of its components.

Warnings: If an occlusive dressing is used, there may be an increase in the incidence of inflammatory reactions in the adjacent normal skin.

Prolonged exposure to ultraviolet rays should be avoided while under treatment with Efudex because the intensity of the reaction may be increased.

Usage in Pregnancy: Safety for use in pregnancy has not been established.

Precautions: If Efudex is applied with the fingers, the hands should be washed immediately afterward. Efudex should be applied with care near the eyes, nose and mouth. To rule out the presence of a frank neoplasm, a biopsy should be made of those areas failing to respond to treatment or recurring after treatment.

Adverse Reactions: The most frequently encountered local reactions were pain, pruritus, hyperpigmentation and burning at the site of application. Other local reactions included dermatitis, scarring, soreness and tenderness.

Also reported were insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity and lacrimation.

Laboratory abnormalities reported were leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Efudex should be applied twice daily with a nonmetal applicator or suitable glove in an amount of the solution or cream sufficient to cover the lesion. When Efudex is applied to a lesion, a response occurs with the following sequence: erythema, usually followed by vesiculation, erosion, ulceration, necrosis and epithelization. The lower frequency and intensity of activity in adjacent normal skin indicate a selective cytotoxic property. Medication should be continued until the inflammatory reaction reaches the erosion, necrosis and ulceration stage, at which time use of the drug should be terminated. The usual duration of therapy is from 2 to 4 weeks. Complete healing of the lesion may not be evident for 1 to 2 months following cessation of Efudex therapy.

How Supplied: Efudex Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

Clinical Studies: The effectiveness of the three preparations as determined by complete involution of solar keratoses was: 2% Solution, 77% of 282 lesions; 5% Solution, 88% of 202 lesions; and 5% Cream, 85% of 189 lesions. In those lesions where complete involution followed treatment, the rate of possible recurrences observed clinically at periods up to 12 months or more was: 2% Solution, 4.6% of 218 lesions; 5% Solution, 1.7% of 177 lesions; and 5% Cream, 5.6% of 160 lesions. Because of the toxic potential of fluorouracil, some physicians preferred to use the 2% solution when large areas were to be treated. Approximately 30% of the lesions required treatment for two weeks or less; approximately 78% required four weeks or less for adequate treatment.

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Nutley, New Jersey 07110

Book Reviews

Organization and Administration of Health Care by Richard L. Durbin and W. Herbert Springall. Pp. 228. Price $9.95. 51 illustrations. St. Louis, The C. V. Mosby Company, 1969.

This volume is reviewed for the increasing number of physicians who have more than a personal concern with the storms of change occurring in medical systems in the U.S. The growing size and complexity of these systems have put comprehension out of reach of the average citizen and perhaps beyond the capacity of physicians to control.

The authors, administrator and associate administrator respectively, of Temple University Hospital, have brought together in 200 pages of well condensed material most, if not all, of the current philosophy of modern day health planners concerning the reorganization and administration of health care.

Of the five chapters, two are worthy of the attention of concerned physicians. Chapter II describes the changing environment in which the health care revolution is taking place and includes concise references to the Hill-Harris and Regional Medical Programs, the Coggeshall and the Millis Reports, Medicare and Medicaid and their impact on medical schools, medical practice and hospital care.

Chapter V, entitled "Beyond Traditional Patterns," emphasizes the urgent need for a partnership between the academician and the practitioner and predicts that this will be accomplished through group practice. Under the provocative subtitles "The Health University," "The Hospital Service Corporation" and "The Regional Health Authority," the authors make some projections which are all the more interesting for the fact that health systems changes underway in Florida appear to be taking the directions which professional planners have plotted during the past decade.

Those parts of the book which deal mainly with reorganization of the hospital will prove tedious for many physicians but will be worthwhile for those concerned about evolution of the hospital-physician relationship.

For those of the medical profession who aspire to membership on a hospital board of directors, this book will put you one up.

Simon D. Doff, M.D.
Jacksonville

Symposium on the Spine by American Academy of Orthopaedic Surgeons. Pp. 289. Price $19.50. 558 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Material for this monograph has been taken from the presentation by the faculty of the Continuing Education Course entitled: "Current Concepts on Management of Disease and Injury Involving the Spine." Contributions have been made by 13 practicing orthopedic surgeons from various parts of the country and one internist, the only contributor who deviates from the purely orthopedic aspects to discuss pulmonary function in scoliosis.

This material is extremely practical as it was compiled for a postgraduate course sponsored by the American Academy of Orthopaedic Surgeons and its Committee on Injuries. The faculty is composed of those active, practicing surgeons who have for several years influenced current diagnostic and therapeutic trends in injury and disease of the spine. Their experience is both wide and varied.

The monograph is very clear, concise and highly practical. The subjects discussed involve those conditions of the spine which are the most troublesome and controversial as to the correct method of diagnosis and treatment. It is recommended not only for the practicing orthopedic surgeon, but also for those surgeons who see and treat patients with chronic low back pain and strain.

Certain portions of the book are also recommended for radiologists.

Floyd K. Hurt, M.D.
Jacksonville

On Death and Dying—What the Dying Have to Teach Doctors, Nurses, Clergy and Their Own Families by Elisabeth Kubler-Ross. Price $6.95. New York, The MacMillian Company, 1969.

Unlike several of the books on how to bluff your way through and avoid having to deal with dying patients, Dr. Ross's book, based on several years of personal contact and intensive work with several hundred dying patients, comes to grips with the problem in a straight-forward manner. Despite the miracles of modern medicine, patients do die, as does everyone eventually. Even physicians are not immortal. Dr. Ross's book helps

us to explore and understand our own fears and weaknesses so that we may establish meaningful contact with our dying patients and avoid the isolation and depersonalization that we usually inflict on them.

This work started when Dr. Ross, a psychiatrist at the University of Chicago, was asked by a group of theology students to help in the preparation of a term project. Their assignment was to write a paper on "Crisis in Human Life." The four students involved felt that death was the biggest crisis people had to face. With virtually no literature to fall back on, Dr. Ross and her students set about to interview a dying patient. Amazingly enough, not one could be found in a large university hospital. Much effort was expended by physicians and hospital staff to "protect" their patients from these interfering outsiders. It is amazing how desperately the dying wish and need to communicate and how diligently we use our own fears and weaknesses as an excuse to avoid this communication.

This was one service that the physician could and did offer his patients in the age before "medical miracles." It is a service that is still badly needed and one that we should not shirk. Dr. Ross's book helps us to recognize this obligation and try to live up to it.

LAWRENCE H. JACOBSON, M.D.
POMPANO BEACH

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. New York, Doubleday & Company, Inc., 1968.

Personnel Administration and Labor Relations in Health Care Facilities by James O. Hepner, Ph.D., John M. Boyer, M.A. and Carl L. Westerhaus, M.S. Pp. 391. Price $15.00. St. Louis, The C. V. Mosby Company, 1969.

Cardiovascular Surgery, Current Practice. Vol. I. edited by Thomas H. Burford, M.D. and Thomas B. Ferguson, M.D. Pp. 273. 134 illustrations. Price $18.00. St. Louis, The C. V. Mosby Company, 1969.

Arrows of Mercy by Philip Smith. Pp. 244. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Tobacco and Your Health: The Smoking Controversy by Harold S. Diehl, M.D. Pp. 271. Illustrated. Price $2.95. New York, McGraw-Hill Book Company, 1969.

War Surgery by Camp H. M. Smith. Pp. 97. Department of Defense, Pacific Command, United States of America, 1969.

The Adolescent Patient by William A. Daniel Jr., M.D. Pp. 444. 76 illustrations. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Spectroscopic Approaches to Biomolecular Conformation edited by D. W. Urry. Pp. 314. Illustrated. Price $15.00. Chicago, American Medical Association, 1970.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Kids, Brains, & Learning by Ray C. Wunderlich, M.D. Pp. 534. Price (Clothbound) $10.50 (Paperbound) $7.50. St. Petersburg, Johnny Reads, Inc., 1970.

Wine and the Digestive System by Salvatore Pablo Lucia, M.D. Pp. 157. Price $3.50. San Francisco, Fortune House Publishing, 1970.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Vital Statistics of the United States 1967. Vol. 1-Natality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

Vital Statistics of the United States 1967. Vol. 2-Mortality, published by the U.S. Department of Health, Education and Welfare, Public Health Service, Washington, D.C., 1969.

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CEVI-BID maintains optimal blood levels of Vitamin C, and avoids "peak and valley" effects of ordinary Vitamin C tablets.

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Dosage: 2 tablets followed by 1 or 2 tablets every 8 hours as required, not to exceed 6 tablets in 24 hours. For maximum nighttime pain relief and to help relieve early morning stiffness, 2 tablets at bedtime.
Available: Bottles of 12, 36 and 60 tablets.



Drip stopped, Congestion cleared

For upper respiratory allergies and infections, up to 12 hours clear breathing on one tablet. Dimetapp Extentabs® do an outstanding job of helping clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely.

INDICATIONS: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, rhinitis, conjunctivitis, and otitis. CONTRAINDICATIONS: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. PRECAUTIONS: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. SIDE EFFECTS: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered. DOSAGE: 1 Extentab morning and evening. SUPPLIED: Bottles of 100 and 500.

A·H·ROBINS

A. H. Robins Company
Richmond, Va 23220

Dimetapp® Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

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THE JOURNAL OF THE Florida Medical Association

Mobile Coronary Care Units

A Preliminary Critique

Sidney R. Nussenfeld, J.D., Eugene L. Nagel, M.D.,
Jim C. Hirschman, M.D., and Milton S. Saslaw, M.D.

The ready acceptance by the medical profession of the concepts of hospital coronary care unit (CCU) and mobile coronary care unit (MCCU) testifies not only to the "strong nationwide feeling"[1] about the high incidence and prevalence of coronary heart disease and the rising mortality from this foremost killer but also to the profession's deep concern with these matters.

Although cardiogenic shock has thus far resisted control, it is now rare to find a common arrhythmia which cannot be terminated by relatively simple procedures applied in time—that is, within a minute or so after onset. The various monitoring devices in use in hospital coronary care units were designed not just to enable an alert staff to spot trouble immediately but also, by back-up systems, to raise the alarm with a less attentive staff.

The CCU has justified its existence[2,3] and is being widely adopted. "Today it may be difficult to find a hospital of more than 200 beds without a CCU."[4] It has been predicted that in time every hospital with 100 or more beds will have a CCU.[5] Indeed, were it not for the availability of the CCU there would be little reason even to think of mobile units. What would be the point of saving a patient stricken in the street only to have him expire in the hospital for lack of the continuous intensive care required for his survival?

From the Departments of Anesthesiology and Medicine (Division of Cardiology), University of Miami School of Medicine, Miami.

Rationale of MCCU

The concept of mobile coronary care found its early support in the studies which pointed out the high mortality in the first minutes and hours after an acute attack, including the period of transit to the hospital.[6] The logic appeared irresistible; since time is of the essence in such cases, would it not be better to send the medical help to the patient rather than wait until the patient could be transported to the hospital?[7] In other words, why not use a mobile unit as an outreach of the hospital?

The objective, therefore, would be to prevent or terminate arrhythmias in the field and en route to the hospital. The equipment, knowledge and skills exist to do precisely that. In the ideal world of the dedicated romantic, the mobile coronary care unit needs no other reason for existence. The point, however, is that for the time being there is no community in the world which has so much money, manpower and material that it need not resort to a cost-benefit evaluation of its medical care delivery programs.

Not enough experience with the varieties of mobile units has been accumulated to permit any firm findings, but the time is approaching when enough data will have become available to make possible an evaluation of the MCCU in terms of its life-saving effectiveness measured, at least in part, by the involvement of manpower, money and material.

Current Models of MCCU

The following brief descriptions would seem to cover the major types of MCCU reported in the recent literature:

1. Belfast, Ireland, model: an ambulance staffed by a physician, nurse and possibly a medical student and equipped to defibrillate and catheterize.[8] Generally called by a physician, after visit to the patient, and used only for "heart attack" cases.

2. Moscow, USSR, models: (a) one type uses an ambulance staffed by a physician and a nurse and is intended only to render first aid in "uncomplicated" myocardial infarction cases; this unit can administer pharmacological agents; (b) a second type, reserved for the "severe, complicated" cases of myocardial infarction, utilizes a special squad consisting of a physician, nurse and paramedical personnel equipped with monitoring devices and defibrillators.[9]

3. St. Vincent's Hospital, New York City, model: this uses an ambulance staffed by a team of seven consisting of attending physician, resident physician, emergency room nurse, ECG technician, student nurse observer, driver and assistant. At the alarm signal, received after screening through police communications, these people have four and a half minutes to report to the ambulance which is equipped to set up a CCU at the location where the patient is found. This unit has an apparent operating territory of 4.5 square miles around the hospital and responds only to heart attack, or presumed heart attack, cases.[10]

4. Miami, Florida, models: these units are not generally used to transport patients to hospitals; a regular contract ambulance is used if and when the patient is stabilized. They respond to all human injury or illness alarms, not merely to heart attack cases which make up only 15% to 20% of their runs.

(a) The conventional unit uses either a specially equipped fire vehicle or a specially equipped rescue vehicle to move the two to four man teams to the patient. The men are all fully trained firemen who have had additional paramedical training for field first aid, including the administration of oxygen, use of the Ambu bag and closed chest heart massage.

(b) A newer model, in experimental use now by a few squads, relies on the same type personnel, but additionally trained to attach and monitor a portable ECG device, to broadcast the readings by telemetry to a central receiving station in the community's largest hospital, and, if so instructed by the physicians constantly on duty at that station, to use the defibrillator with which the squad is equipped.[11]

The developers of each of these models may be presumed to have seen advantages in the arrangements they adopted; but surely the disadvantages of each were clear, and surely, also, they were tolerated only because of other considerations, including lack of financial, physical and/or personnel resources. It is safe to say that no physician would compromise on these matters unless he were forced to do so.

Some Obstacles to Speedy Care

The field of coronary care is of necessity an exceedingly practical one concerned with delivering active therapy to a patient within the very limited time and capabilities available. In the extreme but common case of cardiac arrest, for example, delay of more than four minutes in a relatively young person or of a shorter time in an older person in restarting the heart results in irreversible brain and other damage of such magnitude as to make restarting the heart of questionable value to the patient and his family. The possibility of life-threatening arrhythmias cannot be ruled out in any case at any time after the onset of an attack.[12] Despite the grave contingencies, the loss of time in acute attacks of coronary heart disease is appalling, however understandable it may be. It accounts for the more than 250,000 deaths each year in the United States of victims of heart attacks who never even get to a hospital.[13]

Consider the obstacles to be overcome in getting a victim into a CCU:

1. Patients or their families delay calling for help, frequently in the belief that the pain or discomfort is only "indigestion."

2. The time interval between the patient's call to his doctor and the latter's appearance at the bedside may be critical.

3. Even if the doctor arrived promptly, he might be puzzled by the symptoms; the diagnosis might be unclear. Moreover, few doctors carry resuscitation equipment, including defibrillators, with them.

4. Even if the doctor brought an ECG apparatus with him, the myocardial infarction might not show up early in the attack and, anyway, the ECG might not be decisive without supporting data from lab reports such as elevated enzymes. There are many false negatives as well as false positives in diagnosing myocardial infarction.[14]

5. Even if the physician immediately and correctly diagnosed the case, he might not be affiliated with a hospital or, if affiliated, the hospital might not have any beds available in its CCU (or elsewhere, for that matter).

6. If all else were favorable, there is still the problem of ambulance delay by manpower neglect or indifference, by traffic, or because the vehicle is out on a prior call or, worse yet, on a false alarm.

7. When the patient gets to the hospital he does not go automatically and directly to the CCU. How often does it happen that the patient has to wait his turn in the emergency room, or submit himself to the judgment of a young, inexperienced intern as to the degree of urgency involved?

The mortality rate in myocardial infarction cases in the hospital at large is sometimes as high as 40%. In a well-run CCU the morality rate may be as high as 20%. After discharge from the hospital a discouragingly high percentage of patients fail to survive for truly significant periods, but instead die within a matter of months.

Each Community May Have Unique Demands

In relating this sequence of obstacles we intend only to stimulate serious thinking among the professionals, especially those contemplating the creation of mobile medical care units (whether MCCU or the more common mobile intensive care unit—MICU), as to the type of unit best suited to the community's needs and wishes and as to the concomitant public education to be undertaken. Communities differ markedly in these and other respects[15] and their preferences may be surprising.

It is a truism to state that no medical program is likely to succeed without the community's support. A part of any emergency medical care delivery system, therefore, should deal concretely and effectively with this element of public information, education and rapport.

The Paramedic, Training and Communications

Planning for mobile coronary care requires close attention to the natural history of coronary artery disease. Mobile units are no more likely than CCU's to have much success with pump failure cases. The greatest salvage, derived from the speediest possible arrival at the patient's side, comes from the prevention or termination of arrhythmias, and for this function paramedical staffing seems quite sufficient, if adequate attention is given to training and medical support is available by radio.

It is more and more coming to be recognized that the quality of care in the CCU is dependent not so much on the mechanical and electrical aids (some of which, while impressive, are not uniformly reliable or are ignored in practice) as on the presence of a trained, competent and motivated nursing staff. The nurse is the only one who is always on the front line and in a position to act positively in initiating the life-saving procedures when they will do the most good.[16] So, too, with the mobile unit the prime requirement is a well-trained and stimulated staff. This requirement can be filled nicely with paramedical specialists who are always instantly available, can move fast, are accustomed to dealing with crises and are calm and resourceful when thrust into unexpected situations in unfamiliar surroundings. These people tend also to be permanently assigned and secure in position, so that repeated training sessions are unnecessary, and they are acceptable to their community and knowledgable in its speech and habits. On any reasonable evaluation this type of staffing of an MICU will measure up well.

The matter of communication is sometimes overlooked. It is of utmost importance in raising the alarm. It continues to be of importance until the patient is safely delivered to the hospital. One need not be a seer to predict that future development of mobile care is going to evolve in good measure around the use of telemetry and distant computers to detect arrhythmias and warn of cardiogenic shock and hypotension.[17] This kind or quality of communication requires radio telemetry through the use of clear channels.

The Two Basic Objectives of Mobile Care

In simplest terms, therefore, the basic objectives with which mobile care should be concerned are two: first, to get help to the victim as quickly as possible; second, to provide that help as an interim measure directed solely at stabilizing the victim until he can be gotten into the hospital where a full evaluation can best be made. Anything less would be unworthy; anything more is likely to become mere window dressing and wasteful.

The Time Factor in Rendering Help

First, with respect to the time factor: so far as is known, probably every myocardial infarction results in irreversible heart damage. If that were the end of the event, time of arrival of medical assistance would be of little moment. The problem with myocardial infarction, however, is the

danger of complications, some of which can be controlled if treatment is more or less instantaneous. Therefore, that flying squad is best which, manned by personnel having the skill and equipment to cope with these complications, can get to the patient in the shortest time after the alarm. If it takes minutes to assemble the team, or to get the equipment on the vehicle, or to find the patient, or to go into action, lives may be lost. In short, the race here is to the swiftest, not necessarily to the best equipped and most professional.

From the descriptions of the various flying squad models in the literature referred to and from our own personal experience with the Fire Department Rescue Squads of Miami, Florida, we suggest that no mobile unit is, or is likely to be, uniformly faster in response than such squads. These Miami Rescue Squads have a fairly consistent record of arrival at the scene within five minutes or less after an alarm.

Personnel: Paramedic vs. Physician Staffing

Second, as to personnel: could it not reasonably be argued that for the great majority of serious coronary heart disease cases the emergency treatment indicated will be defibrillation countershock and/or establishment of IV lifelines for the administration of fluids and antiarrhythmic drugs? These actions are quite within the competence of paramedical personnel. Certain of the Miami Rescue Squads are already effecting defibrillations on radio command from hospital station physicians who have monitored the telemetered ECG, as well as closed chest heart massage and other established resuscitation maneuvers. Courses are now being set up in local colleges to expand the training and instruction of nurses and paramedics to act even more as the arm of the hospital physician whose time and talents will thereby be substantially spread to benefit more people. Again, it should be emphasized that the key is the direct communication between the doctor at the hospital station and the emergency-oriented paramedics, physician-trained to a satisfactory standard of achievement.

It is incontestable that physicians riding the rescue vehicle could do more than any paramedic. They could, for example, perform intubations, tracheostomies and open heart massage. They could give intracardiac injections and insert pacemakers. It is conjectural whether such heroic measures will be called for frequently enough to justify the heavy cost of such professional staffing, especially if these professionals go out only on presumed heart attack calls and the rescue vehicle is immobilized while the physician is being paged from the far corners of the hospital.

The "Extra" Benefits Important to Cost-Benefit Evaluations

Mobile care systems are expensive to create and to operate. It is, therefore, desirable to derive "extra" benefits for the community from the existence of these flying squads. Miami does this by having the squads respond to all human emergencies. This strikes us as a wholly rational use of valuable manpower and equipment not only because it avoids reliance on curbstone diagnoses of the presence or absence of a heart attack but also because, responding to human injury alarms at accidents, fires and other emergencies, the rescue squads are sometimes confronted with coronary cases.[18] Telemetered ECGs and IV lifelines can be vitally important in situations other than cardiovascular incidents. The Miami squads would pick these up routinely whereas in other models the vehicle would not even leave the garage.

There are several not inconsiderable advantages of the Miami model not yet mentioned. These squads are in existence, familiar to the people of the community, strategically located to best advantage and, by no means least, do not entail any large new costs in expanding their capabilities. Furthermore, these teams have back-up support in men and vehicles from the rest of the fire department without additional cost. The rescue vehicles are not used to transport patients to the hospital and so are not tied up doing what lesser skilled personnel could do with fairly ordinary vehicles. (If need be, one or more of the rescue people accompanies the patient in the ambulance). Still another advantage of the Miami arrangement is that when the ECG is telemetered from the scene to the central hospital, a conventional paper strip recording is made, reviewed and retained, and can be used for later reference and consultation. There need be no reliance on the small oscilloscope carried to the site, and certainly no need for snap judgments made on the spot.

Summary

The MICU, like the CCU, has a deserved place among the therapeutic procedures used by the medical profession to reduce the excessively high mortality from coronary heart disease. Care must be taken, however, to prevent enthusiasm from overstaffing or overequipping the unit beyond what a rational consideration of the disease process and the community's resources warrant. Community

education and support are essential factors to be borne in mind. Clear channel radio communicaton with physicians based at the hospital is necessary for those units not staffed by physicians. The Miami, Florida, model may be the correct one for many communities in the United States.

Acknowledgment

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Annual Meeting Scientific and Educational Exhibits and Films

Applications are now being taken for presentation of scientific and educational exhibits at the 1971 Annual Meeting of the Florida Medical Association being held May 5-9 at the Americana Hotel, Bal Harbour. The deadline for all applications is December 1, 1970. For the convenience of JOURNAL readers wishing to apply, a form which may be utilized for this purpose may be found on page 42 of this issue. Completed forms should be mailed to David J. Becker, M.D., Chairman, Committee on Scientific Assemblies, P.O. Box 2411, Jacksonville, Florida 32203.

Members interested in showing scientific films during the Annual Meeting are invited to submit descriptions to the Committee on Scientific Assemblies. Sponsors must have produced films themselves and must be present or have a designee present at the showing. If an adequate number of films is submitted, a special time will be set aside on the program for this purpose.

Use of General Duty Ambulances as Mobile Coronary Care Units

Roy M. Baker, M.D. and Capt. John M. Waters Jr.

In their article, "Mobile Coronary Care Units —A Preliminary Critique," Drs. Nussenfeld, Nagel, Hirschman and Saslaw have very ably discussed the rationale of the mobile coronary care unit (MCCU), some of the locales utilizing such units and the problems that have been encountered. They have also discussed the basic objectives of the MCCU and the staffing problem.

The City of Jacksonville with a population of over 512,000 and a land area of 842 square miles faced a very difficult situation when the city fire department took over all emergency ambulance services in 1968. In order to afford rapid access to all citizens, it was necessary to optimally deploy nine ambulances throughout the entire geographical area. For the past year this distribution resulted in an average arrival time on scene of only 4.2 minutes after receipt of a call.

The problem of aiding coronary victims was attacked soon after formation of the new service. A committee of six cardiologists was appointed by Dr. Clyde Collins, President of the Duval County Medical Society, to work on this project with city officials. The idea of a large, specially-equipped MCCU based at the Duval Medical Center was rejected due to the excessive time which would have been required to reach outlying areas. Likewise, it was apparent that doctors and nurses were not available in sufficient numbers to man ambulances. It was decided therefore, to equip the nine deployed ambulances with special equipment for treatment of cardiac patients and to train the fire department rescue personnel who manned them in cardiac patient care.

Fortunately, the ambulances were of a design which afforded ample space for installation of equipment and working room for rescue personnel. All ambulances were equipped with a Life Pak-33 battery powered defibrillator with built-in cardioscope and complete drug kits with contents prescribed by the cardiac advisory committee. Four ambulances were equipped additionally with EKG telemetry equipment. All ambulances have direct radio communications with all emergency rooms of the city's hospitals and can obtain immediate medical advice when required. The special EKG circuit has its base station at Memorial Hospital whose emergency staff gives medical advice to ambulance technicians on request, using the dual EKG voice feature of the circuit. A second outlet is in the coronary care unit.

Sixty-three men are assigned to the rescue and first aid branch of the fire department. All have received over 100 hours of didactic training plus 100 hours of training in hospitals. Four of the ambulances are based at hospitals where the men receive continuing training. These crews are rotated at six months intervals so that each man additionally receives approximately 400 hours of experience and training in hospitals each year. Cooperation between the crews of hospital-based ambulances and the emergency room staffs has been extremely close and after bringing in a patient, the rescue crew immediately goes to work with the emergency room staff.

These ambulances respond to all medical emergency situations as well as coronary cases. For example, over 50 babies have been delivered by the rescue crews. Automobile accidents constitute the largest single category of alarms. During the period January 1, 1970 to June 30, 1970, rescue units responded to 8,209 requests for help. Of these, 505 persons presented symptoms suggestive of heart attacks and were treated by the rescue crews as coronary patients. In 88 cases cardiopulmonary resuscitation was used; 11 D.O.A.'s were reported. Undoubtedly, some of these were already dead when the rescue unit arrived at the scene; yet, in a number of cases patients who were found with no pulse or respiration have been resuscitated and delivered in a viable condition to the emergency room of the hospitals. A follow-up study is now underway to determine how many of the suspected coronary patients suffered from coronary disease and the long-term survival rate of the 88 patients who required cardiopulmonary resuscitation.

Resuscitative measures to date have consisted largely of chest compression and positive application of oxygen. Electrical defibrillation has been used in a number of cases on radioed advice of physicians based on an oscilloscope reading report-

Dr. Baker is City of Jacksonville Fire Department Surgeon and Capt. Waters is Chief Operating Officer, City of Jacksonville

ed by the ambulance technicians. With the operational startup of the EKG telemetry system this month, the use of electrical defibrillation will undoubtedly increase. At the same time, the use of antiarrhythmic drugs will be instituted. The amendment to the Florida Medical Practices Act passed by the 1970 legislature seems to provide ample coverage for such use of drugs provided they are prescribed by a physician. Malpractice insurance coverage for all 63 rescue men is provided by the city's insurance agency at an annual total cost of only $4500, an indication of the low liability the insuror believes is involved.

The normal crew of the ambulance consists of a driver and attendant. In the case of severe coronary occlusion, however, at least four men are usually required and two ambulances are dispatched to provide this manpower. Due to the critical time factor, the first two men to arrive go directly to the patient carrying only an Ambu-bag and a portable oxygen bottle and commence cardiopulmonary resuscitation if required. The two men in the second unit bring in the defibrillator, telemetry unit, and drug kit. Enroute to the hospital two men attend the patient while the fourth man brings the second ambulance to the hospital to pick up his attendant after the patient is delivered. Estimated time of arrival at the hospital and the condition of seriously ill patients is always given by radio to the emergency room staff in advance. In several hospitals, standby cardioresuscitation team calls are made at this time prior to arrival of the rescue team and patient.

Results achieved to date in delivering coronary patients in a viable condition to emergency rooms have been encouraging. However, as cited frequently in the literature, coronary patients often procrastinate in notifying anyone of their condition. As a result, many eventually suffer cardiac arrest or a deadly arrhythmia making it extremely difficult for rescue units to reach them in time to render effective aid. This critical period between cardiac arrest and arrival of the rescue team has been referred to as the "missing link" in our system of coronary care. During the past year the Northeast Florida Heart Association has conducted an intensive campaign to educate Jacksonville citizens in cardiopulmonary resuscitation in order that they may keep a stricken victim alive until arrival of trained help. The city has mailed out to all phone users a sticker to be placed on the phone giving the ambulance number as well as police and fire numbers. Emergency phones are on alternate street corners in the urban area. A broad public educational program to encourage persons suffering heart attack symptoms to immediately call for help should significantly increase the success of the rescue effort.

Concurrently, with the establishment of MCCU's, it is essential that hospital emergency staffs be prepared to accept the incoming patient and quickly administer definitive treatment. Unfortunately, there are too many emergency departments throughout the country that do not have a well-trained and coordinated coronary care team with necessary equipment capable of being quickly mustered.

While the ultimate judgment on effectiveness of the MCCU must await implementation of drug therapy under radioed medical advice and further evaluation of statistics on long-term survival, a number of persons in this city have been returned to a useful life following cardiopulmonary resuscitation. Without it, they would almost certainly have died. The Jacksonville emergency ambulance program is funded by a user charge of $22.50 per run and a tax subsidy costing only 78¢ per person per year. Its effectiveness, combined with the low cost, has made it an extremely popular program with our citizens, who can derive a sense of security which is obtainable in few other places in the nation.

The prehospital phase of early treatment and evaluation of coronary victims will undoubtedly lead to the opportunity to study and learn possible new mechanisms of sudden death.

In evaluating the effectiveness of the various measures, we plan to use three control groups: (a) the national experience in which MCCU's are rare, (b) the Jacksonville experience from January 1, 1970 to November 1, 1970, in which CPR with occasional electrical defibrillation was used, and (c) the Jacksonville experience after November 1, 1970 in which combinations of antiarrhythmic drugs, such as atropine and xylocaine, and electrical defibrillation will be used.

Possibly, significant mortality statistics may be forthcoming. Recent papers from Scandanavia and in this country have destroyed the myth that cardiac victims have no warning of sudden death. The combination, therefore, of continuing education of the Jacksonville community, emphasizing symptoms, early decision time, temporary emergency measures by the family, and rapid, viable transportation by fully-trained rescue squads, monitored constantly under medical supervision, should continue to increase the survival rate of previously labeled D.O.A. victims.

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Its Service to Florida Physicians

Ewen M. Clark, M.D., and Richard E. Gordon, M.D.

Automated multiphasic or polyphasic health testing (APHT) has stirred considerable interest as well as confusion within the medical profession. APHT has an obvious role in the future of quality health care delivery. Advances in the use of the computer for collecting health data using automation and medical aides eliminate much of the tedious effort of the physician. He can focus his efforts increasingly on upgrading health care with efficiency and economy to the patient. However, APHT has encountered problems as it has been introduced into the present health care system in America. Since relatively few physicians have had direct contact with automated health testing, this paper will describe the service as it is developing in Gainesville and elsewhere. We will clarify what APHT is and its most suitable tests, and suggest some guiding principles for its usage to minimize the problems associated with its introduction. We will also discuss costs and logistics, and consider some of the benefits of a centrally managed network of APHT facilities.

What Is APHT

Polyphasic health testing provides the physician with an overview of the status of his patients' physiological, biochemical, and psychological systems. It also provides a summary of family and personal medical history and highlights current symptomatology.

It does not and cannot replace the practicing physician. It can aid the physician and his staff by performing routine repetitive work in a standardized fashion with built in quality control. The system may be expected to accomplish one or more of the following:

1. Increase the reach of the physician so that a larger number of persons will receive a better level of care.

2. Increase the productivity of the physician so that more items of patient care services can be rendered at a reasonable cost and without compromising quality.

3. Increase the economic efficiency of health care services, whether for health assessment, disease detection, or patient care.

4. Increase the overall quality of health care services the doctor can provide, introducing programs which reflect the latest knowledge and most advanced state of the art.

By referring his patient to a center for an APHT profile, the physician eliminates performing routine tests and reduces the time devoted to a detailed history, thus freeing his time and skills for a diagnostic evaluation. He can then complete his workup faster and decide upon the patient's care more confidently and conveniently. The doctor can care for a larger number of patients in the same amount of time, and can devote more attention to a personal relationship and treatment of his patients. Thus APHT both conserves professional manpower and improves doctor-patient relationships.

APHT has its greatest potential in the field of preventive medicine. The comprehensive series of physiological and biochemical estimations provide the physician with an extensive profile of the patient's health. The recognition of relatively minor deviations from the normal alerts the physician to an undesirable trend in his patient's health, and assists him in identifying patients who bear a high risk to certain diseases, especially the chronic degenerative disorders and those with high mortality. The physician is then in a position to begin care at an optimal time for medical intervention and to offer preventive health counseling in a meaningful manner.

APHT combines professional technique and automation to bring the best results to patient and doctor alike. Pointed toward keeping people well, APHT contributes, along with the physician's private practice and the hospital, to the total health care of the population.

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APHT Tests

The following tests and procedures are those that are most suitable for APHT:

1. General History, containing a personal and family medical history, basic demographic data, a short psychological evaluation, and a systematic symptom review.
2. Glucose Challenge Test.
3. Chest X-Ray.
4. Anthropometry.
5. Urinalysis.
6. Electrocardiograms and Vector Cardiograms.
7. Blood Pressure.
8. Cervical Pap Smear and Breast Examination in Females.
9. Audiometry.
10. Spirometry.
11. Visual Acuity, Phoria, Depth Perception, and Color Vision.
12. Tonometry and Visual Fields.
13. Blood Chemical Profile.
14. Hematology.

Because each APHT center operates under one roof and is centrally located, it allows the patient to undergo this comprehensive series of tests worth between $150 and $250 at only 20% of their present cost and in little more than an hour's time. As new and useful automated testing techniques develop that are reliable and valid, as well as economical, they can be added to these services. The usefulness of some testing devices in a screening laboratory—retinal photography, for example, is still debatable. To find its place in a health testing center an instrument or technique should not only be of proven reliability (freedom from error) and safety, it must also be rapid to perform, and have an acceptable degree of comfort and reasonable cost to the patient. Detection rates must be within acceptable sensitivity and specificity limits, and with a realistic yield of pathology.

Uses of APHT

Appropriate uses of APHT, Dr. Malcolm Watts suggests, fall into one of the following categories:

1. Health Appraisal

This category includes examinations to determine fitness for employment, school, military service, life insurance and the like. The detection of disease or disability is an occasional by-product of this type of examination.

2. Disease Detection

This category includes the periodic physical examination of asymptomatic persons who may or may not already be patients, the screening of high risk groups, and surveys of populations to determine health needs. A by-product of such examinations and surveys is inevitably improved awareness of health and health needs, and some health education.

3. Diagnostic Adjuncts

This category includes those procedures and examinations which serve as adjuncts to diagnosis in patient care. They may be part of a hospital diagnostic workup, or carried out prior to admission to a hospital or nursing home or as part of ordinary office or ambulatory care.

4. Patient Surveillance

This category includes the use of APHT for periodic reexamination of patients with a known chronic illness to monitor the health status of the patient with respect to his illness.

5. Adjuncts to Patient Management

This category includes the use of APHT for instruction of patients in those things they should know about their disease and the care they should render to themselves. This is often most effectively done by programmed instruction especially when time, language or culture are barriers to communication between patient and physician.

There is opportunity for extension of these and for many new uses, all to be found within accepted indications and appropriate criteria for success. The spectrum of applications will undoubtedly increase as experience grows in applying APHT.

Guiding Principles

In evaluating the potential of an APHT center the physician can consider some of the following principles which include the essential qualities and properties we believe are necessary in any properly run polyphasic health testing system.

1. Service to Physicians

The center should provide a useful service to the physicians within the community. The primary consumer is not the individual patient but rather the busy practitioner who may refer hundreds of patients. In this context, main features are the ease of obtaining appointments for patients, the speed, reliability and accuracy of reporting, as well as the utility of the report itself.

2. Patient Referrals

Every patient should have a referring physician, clinic or health treatment agency which accepts responsibility for his care. The doctor interprets the results of his patient's APHT results and provides follow-up medical examinations, diagnosis and care. Some screening centers have accepted participants "off the street," the participant providing the name of a doctor to whom the report will be sent. This practice can be extremely annoying to the physician who receives an unsolicited report. Equally significant, serious legal uncertainties may arise as to how much the doctor is responsible for the care of a patient with abnormalities in his APHT report whom he has not previously accepted into treatment.

3. Flexibility

For the physician to obtain maximum utility from this program, the health testing center should have the flexibility to modify the package program to meet the needs of the medical and patient population in the area. These needs differ from place to place, depending on local health and disease patterns.

4. Center Management and Physician Relationships

Good communication between the management of the center and all local physicians is of obvious importance. Lack of a good working relationship can stymie a technically excellent health testing program. One way to ensure this communication is for physicians to participate at every stage of planning, setting up and operation. The center should operate under the continuous surveillance of a committee composed of local physicians. The appointment of a local physician as part time medical director is also an obvious asset.

APHT centers should be established in a manner that operates usefully within and does not disrupt existing medical structure and practices. However, changes in the health delivery system may result from the introduction of a center into a medical community. Center management should cooperate with local doctors so that these changes are made at a pace and in the direction which the physicians in that community believe are desirable.

5. Maintenance

The complexity in technology and computer science involved in these centers demands an extremely high quality maintenance program. With over a hundred participants scheduled for testing daily, a center cannot be allowed to stop operating for more than a few moments because of a technical breakdown. The center management must guarantee an instantaneous response to a call for help. This feature is so important that it cannot be overemphasized.

6. Ethical Considerations

Individual and local centers may run afoul of the same kinds of problems which arise when physicians become involved in the ownership of local pharmacies. A center must conform scrupulously to the principles of medical ethics of both the AMA and the local county medical society in which it operates.

Physicians ask whether APHT will hurt the practitioner. Will a center's operation conflict with that of the pathologist, radiologist or small office laboratory? The answer is that a properly run center should help the practitioner, not harm him. APHT centers are designed primarily to give a larger battery of tests to a greater number of patients than is currently provided, thus expanding the scope of physicians' services. These are screening but not diagnostic tests. Unsuspected abnormalities will be found in large numbers of patients. These will require follow-up by the pathologist, radiologist and clinical laboratories.

Costs and Logistics of APHT

The facilities to provide APHT service are technically complicated and financially expensive to install. It is generally accepted that $1 million in capital is required to finance an individual center. In starting up, approximately 18 months is needed, depending upon the experience of the physicians, engineers and managers involved.

Dr. Morris Collen calculates that his APHT costs were under $25 per patient at the Kaiser Permanente Centers in California. A high level of center efficiency is required and a large volume of patients must flow through a center—at least 25,000 per year—to bring the costs down to near this figure. Therefore, Collen points out, a viable center should serve a catchment area of at least 150,000 patients.

Heretofore, only four groups were financially able to obtain the advantages of APHT—labor unions, government sponsored health agencies, major industrial concerns, and prepaid medical groups. But now industry has entered the field both as a supplier of equipment and computer systems or as an operator of centers. A number of nonprofit groups have purchased systems—

hospitals, county medical societies and county health departments. Private medical groups are also beginning to show an interest. Amidst the plethora of instruments and the complexity of the equipment and computer systems, the physician consumer must be able to form some evaluation of the potential of the system he is about to acquire.

Benefits of a Network

We believe that the preceding principles may be met better in a network of centrally controlled and directed centers rather than in individual local operations. Some of the advantages of a network are described.

1. Centralized Function: Many economies develop centrally due to reduced personnel costs and the advantages of purchasing supplies in large quantities. These result in lower costs to the participants.

2. Continuing Medical and Technical Research and Development: A group of centers can support its own research program both in medical and technical fields. Research and development staff can also plan time to keep abreast of developments both in the pertinent literature and at APHT national and international meetings.

3. Spreading the Risk: Centers will grow at varying rates and therefore some may not become self-supporting for a number of years. A network can carry its own unprofitable members through their developmental stages.

4. Quality Control: An isolated center cannot devote the time and attention to this important problem as well as a strong group of centers with specially trained engineering and technical personnel.

5. Uniform Patient Data: A network can use compatible equipment to gather information for research and for transferring records with ease when a patient moves.

6. Improved Upkeep and Maintenance: Continued preventive and corrective maintenance is necessary for these advanced medical systems. Qualified technicians are in short supply and may not be available at prices local centers can afford. A network is much better able to provide backup to supply personnel for each unit.

7. Personnel Training: One of the fastest growing fields in America is that requiring medical and computer technicians. These personnel will be in great demand for many years. A network can afford to develop its own training schools.

Conclusions

In summary, APHT provides a major step toward the future of medical practice. It is one of the most far-reaching approaches becoming available for improving the efficiency of the overall health care delivery system. This use of advanced medical techniques promises to go a long way toward alleviating critical manpower shortage and spiraling costs in medicine. It promises eventually to help improve the health level of the entire population.

New APHT centers, to fulfil this promise, must pay constant attention to assisting physicians in providing economical, high quality, medical care. The management of an APHT center should demonstrate its concern by its ability and willingness to allow maximum flexibility so that its full potential of service to the profession may be obtained. Courtesy to patients and concern for their privacy and dignity, and for the confidentiality of their medical records is essential.

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Annual Meeting Scientific and Educational Exhibits and Films

Applications are now being taken for presentation of scientific and educational exhibits at the 1971 Annual Meeting of the Florida Medical Association being held May 5-9 at the Americana Hotel, Bal Harbour. The deadline for all applications is December 1, 1970. For the convenience of JOURNAL readers wishing to apply, a form which may be utilized for this purpose may be found on page 42 of this issue. Completed forms should be mailed to David J. Becker, M.D., Chairman, Committee on Scientific Assemblies, P.O. Box 2411, Jacksonville, Florida 32203.

Members interested in showing scientific films during the Annual Meeting are invited to submit descriptions to the Committee on Scientific Assemblies. Sponsors must have produced films themselves and must be present or have a designee present at the showing. If an adequate number of films is submitted, a special time will be set aside on the program for this purpose.

An Approach to the Identification of High Risk Individuals in the General Population

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The purpose of this paper is to describe the use of a demographic method to identify subgroups of the population at high risk to death, and to indicate how this information may be used in the practice of preventive medicine.

As the demand for health care increases it becomes more difficult to provide medical care for all overt illness. This naturally results in a lessening of the effort devoted to the apparently less essential aspects of medicine, such as prevention and early diagnosis. To respond to this situation new techniques must be developed in preventive medicine which will permit more rapid and effective means of identifying the individual who will benefit most from preventive health care. One of these techniques is the identification of individuals with a demonstrable and measurable high risk to certain serious pathological conditions. The identification itself is only a partial solution to the problem, the type of pathology must be recognized and an accurate quantification of the probability of its development determined. With the possession of this information, the physician is then able to advise a positive course of preventive action and modifications to the life style of the patient aimed at reducing the patient's risk.

Identification of High Risk Groups

The probability of death occurring in a ten year period can be calculated from state and national mortality statistics. Geller developed tables for age, sex and race cohort groups for death probability on a national basis. Using morbidity statistics from the state of Florida we have calculated comparable tables. The probabilities for the two populations were constructed in an identical manner.

Table 1 illustrates these data based on the 1960 mortality experience for the United States and Florida in the population enumerated in the census of April 1960. Figures are based on physician-reported causes of death. In Table 1 it can be seen there exists little difference in the probability of death between the United States and Florida white population age groups up to the age of 50. Beyond this range there is a lower probability of death for the Florida population than the corresponding United States population. This difference may be a reflection of selective migration by retirees to a more beneficent climate.

Comparing the United States and Florida nonwhite population, a striking difference in life expectancy is found. The nonwhites of Florida carry a higher risk of death than nonwhites of the United States. This is the case in all age groups with the exception of the group 65 to 69 years old. If this difference were due to random variation, one would expect that in some of these age groups the probability of death of the Florida nonwhites would be less than of nonwhites in the United States. That this is the case only once indicates that the difference in the mortality experience of the two populations is real.

To inquire into the cause specific probabilities for the two populations would involve an extensive listing of tables; to demonstrate the difference three of these tables are produced here. Geller's tables for the United States show more detail than those produced here for Florida. We have listed as a cause of death malignant neoplasms of the digestive organs; Geller's tables give the probabilities of death for malignant neoplasm of the stomach and esophagus, etc. In order to obtain comparable probabilities Geller's categories were combined to conform to the categories used for Florida. Table 2 gives the comparison for four age groups of nonwhite males.

In the first age group it is apparent that much of the difference in the probability of death for nonwhite males is attributable to homicide. For the older age groups, the difference is largely found in arteriosclerotic heart disease and vascular lesions affecting the central nervous system. It can be seen from this comparison that homicide, arteriosclerotic heart disease and vascular lesions are major health problems among the nonwhite population of Florida.

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Table 1.—Chances in 100,000 of Death in Ten Years: A Comparison of Florida and the United States.

	White Males		White Females		Nonwhite Male		Nonwhite Female	
Age	Fla.	U.S.	Fla.	U.S.	Fla.	U.S.	Fla.	U.S.
10-14	938	880	425	410	1,476	1,210	768	630
15-19	1,507	1,440	572	550	2,384	2,181	1,317	1,110
20-24	1,614	1,581	650	660	3,176	3,140	1,980	1,810
25-29	1,728	1,620	865	840	4,245	4,009	3,026	2,720
30-34	2,320	2,120	1,240	1,220	5,669	5,351	4,670	3,920
35-39	3,592	3,300	1,888	1,930	8,183	7,618	6,552	5,670
40-44	5,905	5,560	2,970	3,020	11,639	10,860	8,927	7,980
45-49	9,591	9,260	4,465	4,600	16,837	15,970	13,157	11,610
50-54	13,507	14,340	6,195	6,850	23,943	21,818	18,804	16,360
55-59	19,955	21,490	8,671	10,680	35,897	31,500	28,004	23,720
60-64	27,871	31,420	12,854	16,930	45,053	42,594	33,675	30,710
65-69	36,571	44,410	20,131	26,920	49,323	52,100	34,727	37,870

Table 2.—Chances in 100,000 of Death in Ten Years, by Cause, Nonwhite Males: A Comparison of Florida and the United States.

	Probability	
Cause of Death: Age 30-34	Fla.	U.S.
Homicide	1,366	874
Motor vehicle accidents	538	441
Arteriosclerotic heart disease and chronic endocarditis	421	477
Vascular lesions affecting the C.N.S.	190	245
Hypertensive heart disease	154	192
All other causes	3,000	3,122
ALL CAUSES	5,669	5,351

Cause of Death: Age 40-44	Fla.	U.S.
Arteriosclerotic heart disease and chronic endocarditis	1,633	1,730
Homicide	1,148	678
Vascular lesions affecting the C.N.S.	1,036	951
Hypertensive heart disease	681	715
Motor vehicle accidents	579	479
All other causes	6,562	6,307
ALL CAUSES	11,639	10,860

Cause of Death: Age 50-54	Fla.	U.S.
Arteriosclerotic heart disease and chronic endocarditis	4,879	4,608
Vascular lesions affecting the C.N.S.	3,059	2,644
Malignant neoplasm of the digestive organs	1,626	1,375
Hypertensive heart disease	1,561	1,650
Malignant neoplasm of the respiratory system	1,094	1,091
All other causes	11,724	10,450
ALL CAUSES	23,943	21,818

Cause of Death: Age 60-64	Fla.	U.S.
Arteriosclerotic heart disease and chronic endocarditis	11,000	10,222
Vascular lesions affecting the C.N.S.	7,167	6,196
Hypertensive heart disease	3,742	3,640
Malignant neoplasm of the digestive organs	2,834	3,024
Pneumonia	1,891	1,704
All other causes	18,419	17,808
ALL CAUSES	45,053	42,594

Table 3.—Example of Health Hazard Appraisal Nonwhite Male Age 60.

Risk of Death	Probability	Risk Factor	Adjusted Probability of Death
Arteriosclerotic heart disease	10,222	2	20,444
Vascular lesions	6,196	2	12,392
Hypertension	3,640	1	3,640
Malignant neoplasm of the digestive organs	3,024	1	3,024
Pneumonia	1,704	1.2	2,045
All other causes	17,808	—	17,808
ALL CAUSES	42,594	—	59,353

Identification of the Individual

This method formulates a technique to calculate the probability of death as a consequence of belonging to an age-sex-race cohort. To particularize for an individual, details of the individual's physiological and biochemical functions and life style must be known. In this way, the known precursors of disease can be recognized in that individual and an amended probability of death calculated. This technique has been proposed and developed by Sadusk and Robbins with a calculation of what they call the Health Hazard Appraisal.

The basic procedure is to modify the estimated probability of death as taken from Geller's tables according to the characteristics of the individual. For example, suppose a physician is examining a nonwhite male age 60 who smokes heavily. From Table 2 we see that this individual has 42,594 chances in 100,000 of dying in the next ten years by virtue of his age-sex-race category. However, smoking being closely associated with arteriosclerotic heart disease, vascular lesions and pneumonia, the risk of death from these conditions is greatly increased. Assuming that a heavy smoker is two times as likely to die from arteriosclerotic heart disease and vascular lesions, one point two times as likely to die from pneumonia than the average person, then a new estimate of the probability of death can be computed for that individual as illustrated in Table 3.

Thus the estimated probability of death in ten years for this individual is 59,353. The physician can now inform this patient that his risk of death could be reduced by (59,353-42,594) 59,353 = 28% if he would stop smoking.

A weakness in this technique lies in the assignment of values to the risk factor. At the present time this can only be done on a "best guess" basis using the judgment of a panel of experienced medical experts. Experience has shown they will reach a general consensus for these values without a great amount of disagreement. In other fields this is considered a valid technique when no other is available. Statistical analysis of these risk factors based on actual morbidity experience over the years will allow for an increasingly accurate value to be given to each risk factor.

We propose to institute several minor changes in Sadusk and Robbins method. The first is the use of the tables of probability of death for a particular region rather than the United States as a whole. Thus for use in Florida, the mortality experience of Florida will be used. The second modification is that a five year probability of death will be used rather than a ten year one. Finally, for statistical theory reasons, the method of computation of the probabilities will be changed.

Preliminary work using a crude form of the Health Hazard Appraisal on medical students who had been screened suggests that quantifying the increased risk attached to obesity, smoking, hypercholesterolemia, etc., provides a strong motivational incentive to modify these physiological variables to a more nearly normal level. After a suitable time has elapsed the abnormal variables can be measured again and a new Health Hazard Appraisal calculated; the new determination then reflects the improvement which has occurred by the reduction of the probability of death. This is frequently associated with an increased sense of well being as a result of improved dietary and exercise habits. The combination of these influences reinforces the individual's determination to pursue his improved life style.

The Gainesville Automated Polyphasic Screening Center will use this technique as a routine procedure. As the screening will be on-line it will be possible using the computer to calculate a Health Hazard Appraisal for each participant. This will be a part of the screening report which is forwarded to the physician. Continuing studies will be conducted to refine and adjust the risk factor values; thus offering to the physician an additional tool for maintaining optimum health for the patients in his care.

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Functional Prognosis of the Hemiplegic

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The ultimate solution to the stroke problem, as in so many other disease processes, undoubtedly lies in the prevention of cerebrovascular disease, and we eagerly await the final result of much sophisticated research in this field by our neurological colleagues. In the meantime, however, we are faced with a rehabilitation problem of overwhelming magnitude. Some idea of the extent of the problem can be gained by realizing that there are approximately 500,000 new stroke patients in the United States every year, and that at any given time our total stroke population numbers approximately 2,000,000. Many are under 65 years of age, but only about 500 per year achieve vocational rehabilitation.[1] Therefore it behooves us as physicians and members of the rehabilitation team to develop truly effective techniques for restoring function to the greatest possible number and in the most efficient manner possible. Inasmuch as our rehabilitation resources are limited, especially in terms of manpower, it becomes of the utmost importance to identify early in the illness which patients have retained sufficient potential to make the rehabilitation process a worthwhile effort and which patients are not rehabilitatable and will require custodial care. Equally as important would be the ability to define over what period of time rehabilitation techniques are most effective, and at what point in time our efforts fail to produce any further functional yield. Thus, the patient, his family, his physician and his therapists would all benefit greatly if rehabilitation goals could be intelligently established at the outset on the basis of an accurate functional prognosis.

Unfortunately, a method of accurately predicting the functional attainment of a given stroke patient does not exist at the present time. There are too many variables present in the hemiplegic, and the multifaceted neurological deficit which remains in the patient with a completed stroke thus far has rendered early prognostication very difficult in all but the most obvious cases. G. F. Adams has stated: "Contradictory views on the prognosis of strokes have been the rule in medical writings, and for centuries hemiplegics seeking reassurance on recovery have had a wide range of opinions to choose from."[2] We can, however, turn to our own past experiences and that of others in an attempt to sort out some meaningful information upon which to base a reasonably accurate estimate of future functional levels in the hemiplegic patient.

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Survival Prognosis

From our own experience, as well as from a synthesis of the literature, the following overall appraisal can be made. Approximately 20% of stroke victims die during their initial illness, about 20% recover only to the extent of requiring custodial care, and fully 60% can be rehabilitated to some degree of independence.[2-8] This 60% includes those patients who achieve a level of self care within a family setting, a smaller proportion who achieve an independent living status, and an even smaller group who are vocationally rehabilitated as well. Fifty percent of those who survive the initial insult will survive an additional five years. According to Adams,[8] the recovered hemiplegic has an even chance of a relatively active life for six years if under 65 at the onset of disease, or for three and a half years if over that age. Robinson[9] in a study of over 1,000 patients with cerebral thrombosis indicates a somewhat higher five year survival rate of 59%.

General Factors Affecting Functional Prognosis

There are seven major areas of possible impairment which must be carefully evaluated in order to arrive at an overall estimate as to future function.[3] These include motor defects, sensory defects, defects in communication, defects in mentation and learning, defects of execution, psychological impairment, and finally, impairment from associated disease.

(1) Motor loss is perhaps the most obvious sequela in the stroke patient and, hence, the very term hemiplegic. For many years the motor deficit was felt to be the major determining factor in the success of rehabilitation. While unquestionably important, we now know that sensory defects

affecting input to the brain are at least equally detrimental to future function.[10] Paralysis nevertheless constitutes a significant handicap, and its resolution is a most encouraging sign to doctor and patient. In general, it can be said that prolonged flaccidity is a poor prognostic sign, and if it persists more than a few days without some evidence of developing spasticity or voluntary movement, the prognosis for functional recovery is poor.[11] If some degree of spasticity or increased muscle tone has not occurred within two weeks, there is little hope of motor return to a functional level. In most patients, any paralysis remaining at three months will almost certainly persist, although some slight improvement may take place up to six months. In certain patients with internal capsular lesions, a nearly pure motor deficit may occur, according to Fisher and Curry.[12] In these cases, the prognosis for recovery from paralysis is excellent and may occur over a period as long as twelve months.

(2) Sensory loss may be slight with minor loss of touch and pin prick, or may be severe with complete hemianopsia, hemianaesthesia, loss of position sense and loss of appreciation for half of the body. Cortical lesions may result in loss of joint position sense, loss of two point discrimination and astereognosis. Impairment of these functions is an extremely poor prognostic sign for the upper extremity even in the presence of minimal paralysis. Loss of proprioception alone may render independent ambulation unsafe and at times impossible. The degree of proprioceptive impairment may be evaluated by testing progressively more proximal joints, and loss of joint position sense at the level of the knee and hip indicates a poor prognosis for gait, while even distal joint impairment in the upper extremity bodes ill for satisfactory function. A peculiar sensory disturbance consisting of a lack of awareness of the involved side of the body, or loss of body image may result from lesions of the parietal lobe of the nondominant hemisphere.[3] Such a defect results in failure to recognize and use the hemiplegic side, even though there may be little motor impairment. This defect also seems to affect the normal side of the body in that postural adjustments cannot be made to accommodate the involved side, and the patient tends to fall or lean to the side of involvement.[13] When this situation is present, rehabilitation goals must be extremely limited and self care activities and ambulation are unattainable.

Also classified as sensory impairments are disturbances of vision. Hemianopsia, or blindness on one side, does not preclude successful functional recovery, but may add significantly to the sum total of all deficits. Of more importance is disturbance in visual perception. Occurring more frequently in left hemiplegics, this defect is characterized by poor perceptual organization including loss of geometric sense, inability to draw figures, and failure in tasks involving spatial analysis. This particular disturbance does not affect gait adversely, but results in a high proportion of failures in activities of daily living.[14] Its increased frequency in left hemiplegics accounts for the occupational therapist's feeling that left hemiplegics are poorer candidates for rehabilitation than right hemiplegics, a feeling not shared by most physical therapists.

(3) Communication loss or aphasia may be either expressive or receptive, and occurs with lesions of the dominant hemisphere. A severe receptive loss may seriously handicap the entire rehabilitation program, inasmuch as the patient will not comprehend instructions, and is a very poor prognostic sign if persistent. On the other hand, a primary expressive loss is perfectly compatible with achieving independence in self care and ambulation, though it remains an obvious handicap to vocational rehabilitation. Indirectly, an expressive aphasia may have adverse repercussions upon the rehabilitation program in that it frequently results in extreme frustration and carries over into other therapy areas. In general, however, improvement in communication may take place over a longer period of time and may resolve significantly after many months up to two years, so that its initial prognostic value is lessened.

(4) Impairment of mentation and learning capacity may occur to a severe degree with extensive frontal lobe damage. Such cases may demonstrate relatively few other neurological deficits, but the prognosis is extremely poor. Such patients show clinical features similar to senility with lack of attention span, poor memory, and little motivation for recovery.

(5) Impairment of execution, or apraxia, may occur in certain stroke patients. This defect is characterized by the loss of ability to perform a previously learned action such as waving goodbye or buttoning a blouse. It is not due to weakness, sensory loss, or incoordination, and is manifested on the sound side as well. Its presence is usually a poor prognostic sign, although minor degrees may produce only slight clumsiness. Apraxia may improve with practice or repetition in some cases.

(6) Psychological effects are many and varied.

They may take the form of hostility, depression, emotional lability, or resentment and non-cooperation. In general, the effect of these disturbances is determined to some extent by the pre-illness personality of the patient. A knowledge of this pre-illness personality is extremely valuable in establishing a functional prognosis from the psychological standpoint.

(7) Additional physical impairment from associated disease must also be taken into consideration in trying to assess prognosis for future level of function. Heart disease, obesity, chronic illness and musculoskeletal defects all mitigate against good functional recovery since, in general, increased energy expenditure is necessary at the new functional level.

These are, in general terms, areas of possible impairment in the hemiplegic patient which must be thoroughly identified and evaluated in any attempt to arrive at an overall prognosis for future functional activity. Attention will now be focused upon recovery of the upper and lower limbs. Their respective prognoses differ as radically as do their normal functions in the healthy state, for it has been estimated that fully 60% to 70% of hemiplegics can be made ambulatory, while approximately the same percentage will have no significant functional use of their upper extremities.[4]

The Upper Extremity

The upper extremity, as is well known, is highly sophisticated due not only to its complex and coordinated variety of motor skills, but to its refined and elaborate sensory mechanisms providing feedback for intricate tasks. The relatively large number of both sensory and motor nerve endings in the hand and upper extremity require large areas of representation in the cerebral cortex, hence the chance of involvement of these areas by arterial occlusion or hemorrhage is great. Moreover, because of the more precise and complex function of the upper extremity, any degree of damage to its motor or sensory area is apt to produce more functional impairment than in the lower extremity. The hand which is spared but deprived of its placement by more proximal paralysis will be relatively useless. A relatively normal upper extremity with a useless hand will be useless. An upper extremity with normal motor power including the hand but with no sensation will be severely impaired. Thus, a defect in any portion of the sensory motor arc of the upper extremity may have profound effect upon its function as a whole.

It has been our experience that if no motor recovery has begun to occur in the upper extremity within two weeks, the extremity will never regain significant functional value. If motor recovery commences within this period but remains confined to one portion of the extremity and does not progress within a week to include other segments of the limb, the prognosis for function is likewise dim.[15] If motor recovery has been complete but the cortical sensory mechanisms of stereognosis and proprioception are significantly impaired beyond three months, the limb will remain an assistive device. If both motor recovery and sensory recovery are complete but the patient has impaired visual perception and spatial analysis due to right parietal damage, functional use of both upper limbs will be severely limited. All in all, about two thirds of hemiplegic patients will have a functionless upper extremity, and one third will have a functional assistive arm for self care.

For this reason, therapy goals for the upper extremity in all but a very few hemiplegics should consist of retraining the patient as a one handed individual. Secondary goals should consist of maintaining sufficient motion in the paralyzed limb for dressing, and assistive training of the extremity with residual motors.

The Lower Extremity

The lower extremity by contrast requires much less in the way of sophisticated integrating mechanisms for its satisfactory function. Locomotor control for the lower extremity is in fact predominantly subcortical in nature, and hence cortical damage does not interfere to such a great extent with its primary role of standing and walking. To be sure, the gait of a hemiplegic does not often return to its normal smooth rhythm, but as someone once said, "An abnormal gait is much to be preferred over no gait at all." The failure of return of voluntary motor activity in the lower extremity within two or three weeks does not hold the same grim prognosis for function as in the upper extremity. The seemingly flail lower extremity, when subjected to weight bearing may respond through stretch reflex stimulation and support the body weight surprisingly well. Thus stimulated, the spastic quadriceps may support the weight of the body with the knee in some flexion, or static mechanisms may be used as an alternative to provide knee stability by hyperextension. Gross flexor muscle reflex patterns may be utilized to advance the plegic leg, and gross extensor reflex patterns used to stabilize the limb. The hemiplegic with

residual knee instability requiring a long leg brace will not become an independent walker. In our experience, significant return of voluntary motor function in the lower extremity may occur up to six months, although the level of functional activity for the lower extremity is fairly well established by three months.

Sensory defects take their toll in the lower extremity as well, and an individual with severe proprioceptive loss which persists longer than six to eight weeks will have a poor prognosis for independent ambulation. Patients with loss of body image almost never achieve independent ambulatory status due to their inability to compensate on the normal side for shifts in the center of gravity. However, all in all only 25% to 30% of hemiplegic patients surviving the initial insult will fail to ambulate, albeit most require the use of some assistive device such as a short leg brace, crutch or cane.

Rehabilitation Considerations

An early determination of the functional prognosis in the hemiplegic is essential to a sound and efficient rehabilitation program. Such a determination must be made on the basis of many factors other than motor loss, for the stroke patient is a multihandicapped individual. Although certain defects such as aphasia and intellectual impairment may improve slowly up to one or two years, cortical defects involving sensory input such as proprioception, loss of body image and loss of visual perception are not likely to improve after three months and are relatively fixed by six months. This also holds true for motor defects, the degree of paralysis present at three months tending to remain the same or at most showing very slight resolution beyond that time. A realistic approach to rehabilitation of the hemiplegic includes recognition of the limitations imposed by this neurologic loss, and the exploitation of remaining normal functions and talents to a maximum degree. At the same time sensible goals should be determined for the patient which may vary from self care to complete independence in living status and, for all too few, vocational restoration as well. The patient and his family should not be misled into a long and expensive therapeutic program encompassing months and years of useless treatments in an attempt to restore permanently lost functions, and generally culminating in despair, if not financial disaster. In like manner, our limited paramedical personnel should not be devoting valuable time and effort toward sustaining false hopes and impressions. It behooves us as physicians to assume the initiative in dealing frankly and realistically with the stroke patient and his family regarding his future goals and ultimate prognosis. We owe them no less.

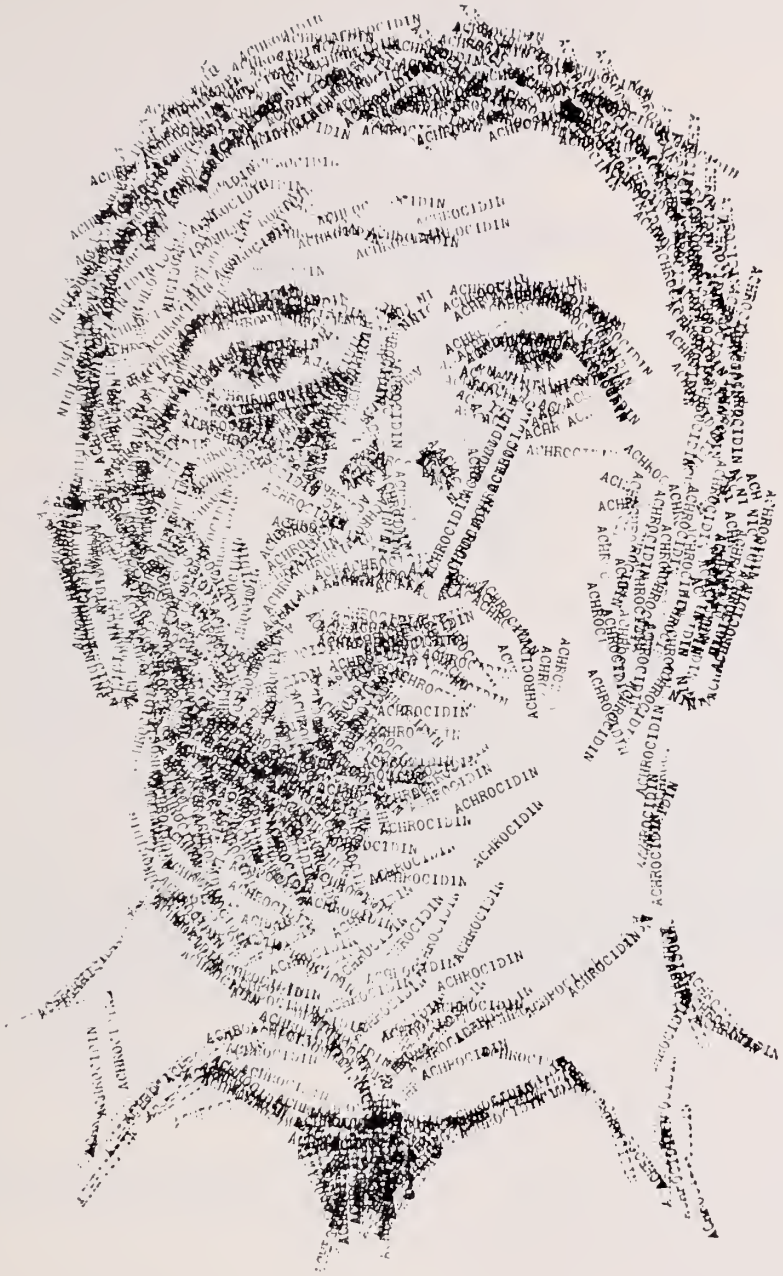
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Letters

Dear Dr. Straight:

Your recent articles on Seminole medicine in the August issue of the Journal of the Florida Medical Association interested me very much. Since spending about six months of 1969 and 1970 studying the Seminoles here, I thought you might welcome a few thoughts regarding a number of details which I have found to differ with your account. Not being a recognized authority on these matters, I hesitate to challenge your presentation, but reference here is made to items such as the following:

Josie Billie's Indian Bible is a Creek translation, not Miccosukee. The latter language is not in published form as yet.

Josie Billie is still "doctoring." Within the past year I have personally known of such activities of his both at Big Cypress and on the Tamiami Trail.

Josie has not been preaching for quite a few years. He did preach some, but he was never a full-time minister.

There was never a Green Corn Dance at Dania.

Josie Billie probably should not be represented as "medicine man of the Miccosukee Tribe" in view of the present political differentiation between the two tribes, even though his native language is Miccosukee rather than Creek.

In addition to these details, the account of Josie Billie's break-up with his first wife, Louise, who is still living and whom I interviewed with members of her family quite at length last summer, differs considerably at several points with her account, and does not seem to match the expectations of Seminole traditional culture.

Also, contrary to Mr. Smiley's representation of the Green Corn Dance, my impressions from the entire four days and five nights of the most recent celebration were that non-Indians are indeed invited to the "picnic day," but the preceding and particularly the following rites are still very sacred and exclusive. Perhaps some differentiation of this sort might have been made.

It occurs to me to say, by way of further introduction, that I have been teaching anthropology for about twenty years and am, with my wife who is a musician, making a study of the impact of Christianity on the Florida Indians, including a transcription and analysis of their sermons and hymns.

James O. Buswell, III
Jamaica, N. Y.

Mr. Buswell is professor of anthropology, Department of Sociology and Anthropology, St. John's University, Jamaica, N. Y.

Dear Dr. Collins:

The book review, "On Death and Dying," published in this issue is not one of the books sent to the Journal, but one that I spent my own hard-earned $6.95 for after having the opportunity of hearing Dr. Ross at a seminar sponsored by the Palm Beach Mental Health Association in Boca Raton about a month ago. From my point of view, it is probably one of the most important books I have run across in a long time.

I enjoyed seeing my scenic photograph on the cover of the Journal last month. I would like to get the original back if possible to display alongside the cover on my photographic bulletin board.

Lawrence H. Jacobson, M.D.
Pompano Beach

Dear Editor:

Dr. Harry Beller's letter in the September issue of the FMA Journal deserves comment—and from more powerful voices than mine. We should not be deterred by fear of becoming involved.

Apparently, where politics are concerned, some abandon the objectivity of our medical training.

(Continued on page 37)



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Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision. Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.



Indication—Demulen is indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear, since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Demulen. Therefore, if such tests are abnormal in a patient taking Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Demulen may mask the onset of the climacteric. The pathologist should be advised of Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions; neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

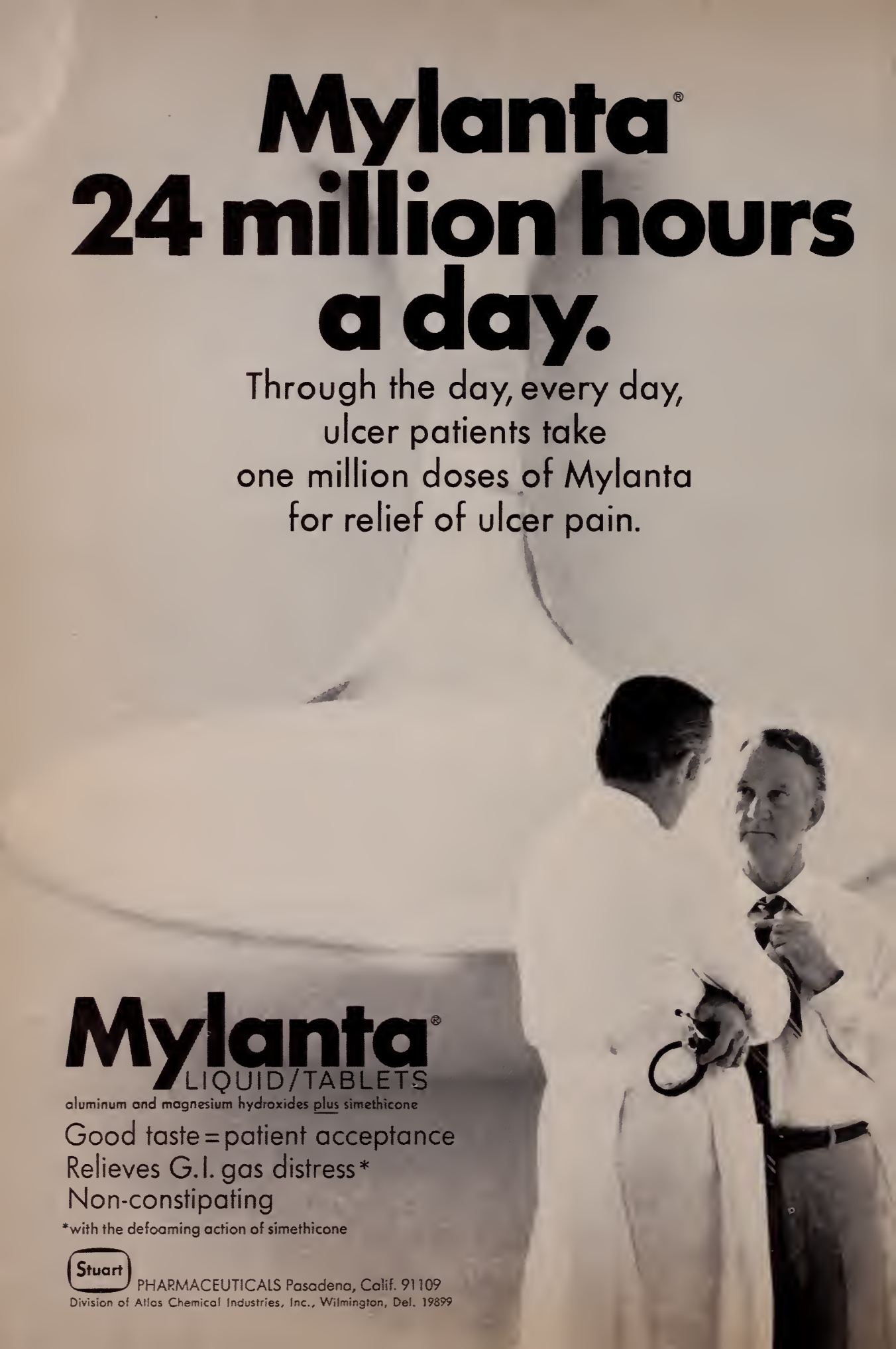
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The many delegates at the F.M.A. meeting undoubtedly represented the several social and governmental philosophies. At the extremes were the Democratic and Republican party faithfuls who believe even the unbelievable as well as the total skeptics who accept nothing that our leaders propose, even if true, logical, or moral.

In regard to the attitudes towards the National Guard (the Kent State University killings preceding this meeting), some believe that they can do no wrong; others that they should use only enough force to protect life and property.

Dr. Beller should understand that the motion to approve our Vietnam policies and all actions of the National Guard was unexpectedly introduced and rapidly passed. The delegates were concentrating on the several urgent and pertinent medical problems and were not prepared to accept a lengthy and disruptive extraneous discussion that would polarize the group even before the purposes of the meeting were approached.

The unanimity of the vote of approval for all acts of the powers that be should not be taken too seriously.

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Editorial

Automation in the Practice of Medicine

Apparently not well known to all FMA practitioners, including the editor, biomedical instrumentation or the use of computers in medicine has been slowly sweeping the state, the tail end of a gigantic mechanical medical hurricane which began in California.

Computerized billing has been around for a long time but recently in Hialeah a new innovation was announced in rendering workmen's compensation bills for physicians, who simply phone in a daily report. When the case is closed, a computer prints an itemized bill on form FIC-9. Miami has given birth to a new monthly journal on multiphasic health, and last month in Tampa, a computerized pediatric diagnostic telephone service became available to every physician in the state. In Gainesville, multiphasic screening programs have been around for some time. Elsewhere in this issue are two articles from there, which at first glance seem like a statistician's dream, but to one of our reviewers was a practitioner's nightmare. He opined that such would discourage preventive medicine in the doctor's office, set up a cheap do-it-yourself annual physical examination and allow uneducated charlatans to practice on the gullible public.

Outside the state, a computer research program has established a means of improving patient scheduling at multipractice clinics and hospital outpatient departments. The aims of this program are to reduce patient waiting time, total time spent in the clinic and lower costs to the patient. It also makes more efficient use of the physician's time as well as equalizing their workloads.

Computers are now being used in automated poison control centers and in donor matching. Routine ECG analysis is done by computers with a greater degree of accuracy than interpretation by a physician and if the tracing is abnormal, the computer offers a possible diagnosis. Automated history taking has, in its simplest form, been available for many years and now computer personality screening is being used by neurologists, psychiatrists and neurosurgeons. The treatment of patients in intensive care and coronary units would come to a standstill if it were not for the monitors designed to measure dozens of body functions. At the University of Alabama, the head of the surgical department thinks that care of critically ill will be best done when it can be entirely done automatically since a piece of machinery once taught to use rules and logic which apply to any problem, doesn't make mistakes and doesn't rotate off the service every three months. Some systems integrate all the hospitals' medical, statistical and financial data. On admission, a patient is entered into the computer records. From that point on, almost all communications between doctors, nurses and laboratory technicians are carried out through the computer, providing quicker processing of legible and more accurate orders and an automatic accounting of all transactions.

One gets from a computer what one puts into it and if we don't work jointly with those who are developing such programs, neither they, nor the computers will know what the practice of medicine is all about. As long as we use computers like a reference book to supplement our own experience, well and good, but if doctors through avarice, inadvertence or excessive workload use them substitutionally, a new type of medicine will evolve. Medicine is not the diagnosis and cure of disease but the diagnosis and treatment of a patient who comes in distress to the physician. The patient's history is a message and he comes seeking not only relief, reassurance, permission and treatment but also punishment, purification or death.

The primary basis for the computer's usefulness in medicine is its ability to retain and recapitulate data enabling the physician to examine more information more intensively, to sharpen his diagnostic capabilities, so resulting in better care for his patients. A computer cannot give results surpassing those obtained by precise manual computation, say some authorities who believe that computers duplicate noncreative thinking but not creative thinking.

There is no doubt that in time, more efficient and better machines will evolve. Whether some day one will become more proficient, capable, humane, compassionate and reassuring than a human physician is a thought more alarming than government-controlled medicine.

C.M.C.

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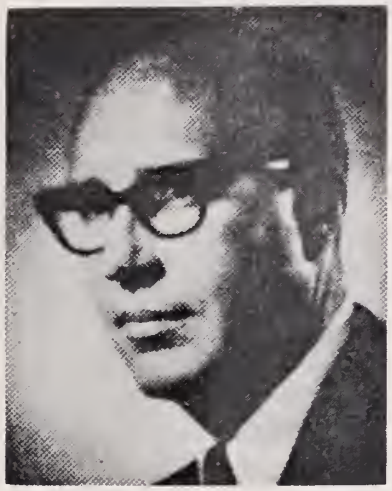
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Send Application before December 1, 1970 to:

David J. Becker, M.D., Chairman
Committee on Scientific Assemblies
P. O. Box 2411, Jacksonville, Florida 32203

ORGANIZATION



Dr. Lane

Dr. David C. Lane of Ft. Lauderdale has been appointed to the National Health Advisory Council by President Richard Nixon. A member of the Committee on State Legislation of the Florida Medical Association, Dr. Lane is one of three physicians serving on the Council.



Dr. Coulter

Norman F. Coulter, M.D., a member and past president of the Orange County Medical Society, was elected vice president of the American Academy of General Practice, at its annual meeting in San Francisco, on September 28, 1970.

Dr. Coulter had served as one of the Florida Academy of General Practice delegates to the AAGP Congress of Delegates for thirteen years prior to his election to the Board of Directors for a term of three years in 1967. He was chairman of the Academy's insurance committee for two terms and is presently chairman of the AAGP Commission on Membership and Credentials, and a member of the publications committee.

Dr. Coulter has been in general practice in Orlando since 1946 and has been a delegate to the FMA House of Delegates for 18 years.



Among those attending the AMA Conference on Medical Ethics at the Ambassadors Hotel, September 19-20, in Chicago were Drs. John J. Cheleden, Chairman of the FMA Judicial Council, Floyd K. Hurt, President-Elect of the FMA and John W. Glotfelty, representing Polk County Medical Association.

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The Press—and The Image

Rufus K. Broadaway, M. D.

American Medicine, indeed, Dade County medicine, is having a bad press! Several recent editorials in our local newspapers have put doctors in the poorest possible light. A typical accusation is that the medical profession in metropolitan Miami is urging the building of unneeded hospital beds for the purpose of continuing unnecessary hospitalization of patients. In an effort to clarify some of our problems, we met with members of the newspaper's editorial staff, requesting that we be allowed to present our side of the situation so that reporting could be based on fact. This effort was met with another derogatory editorial.

What are we then to do? We do not have access to widely circulated publications, nor, apparently can we tell our story in the press, because it simply is not news.

As a basis for action, one must realize that some of the criticism of doctors is valid and justified. All doctors do not overcharge patients, but some do. All doctors have not taken advantage of the Medicare boondoggle, but some have done so. It ill behooves the wealthiest profession in our country to battle for fees in the market place. We may well complain of harassment in the press; meanwhile, however, we have abdicated our position as leaders in the care of the nation's wealth. In our steadfast failure to propose innovative methods for bettering quality and delivery of medical care we have seen put upon us unsatisfactory, unwieldy, and unworkable schemes. The greatness of our freedom to do the job ourselves has fallen, partly through default, to restrictive rules and primitive legislation.

Our image will be improved by action, not by words in newspapers or magazines. Availability to patients, understanding in dealing with the medical public, willingness to work with government and the community, imagination to explore efficient and time-saving methods, ability to place service above tradition, and dedication to a profession of caring and healing, will go far toward polishing a spattered image.

Reprinted from the Dade County Medical Association's President's Page, April 1970.

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MEETINGS

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Committee on Postgraduate Education

NOVEMBER

2- 7 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D., c/o Heart Association, Box 10100, St. Petersburg 33733.

11-14 Today's Hospital Problems: An Interdisciplinary Approach—Fourth Annual Conference, Tides Hotel and Bath Club, Redington Beach. For information: M. A. Barton, M.D., Mound Park Hospital, St. Petersburg 33701.

13-14 ENT for the Family Practitioner, Sheraton Four-Ambassadors Hotel, Miami. For information: Frederic W. Pullen II, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

14 Ninth Annual Physician's Seminar on Respiratory Diseases, J. Hillis Miller Health Center, Gainesville. For information: Edward W. Swenson, M.D., P.O. Box 8127, Jacksonville 32211.

21-22 Joint meeting of American College of Physicians and the Florida Society of Internal Medicine, Langford Hotel, Winter Park. For information: A. M. Ziffer, M.D., 22 W. Lake Beauty Dr., Orlando 32806.

19-20 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville. For information: Div. of Postgraduate Education, Box 758, J. Hillis Miller Health Center, Gainesville 32601.

30-Dec. 5 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D., c/o Heart Association, Box 10100, St. Petersburg 33733.

DECEMBER

3- 6 Eighth Annual Cardiology Seminar, Rose Hall Holiday Inn, Montego Bay, Jamaica. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33701.

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

JANUARY

7-10 Eighth Annual Postgraduate Seminar in Anesthesiology, "Anesthesia and the Nervous System," Diplomat Hotel, Hollywood. For information: Jordan Katz, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

11-12 Infectious Diseases 1971—Treatment and Prevention, Eden Roc Hotel, Miami Beach. For information: Mrs. Gwen Hendel, Public Relations Office, Mt. Sinai Hospital, Miami Beach 33140.

11-16 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

13-16 Postgraduate Seminar in Surgery Art and Science in the Therapy of Difficult Problems in Surgery, Eden Roc Hotel, Miami Beach. For information: Robert Zeppa, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

24-28 University of Miami Annual Seminar on Pediatric and Adult Urology, Sheraton Four Ambassadors Hotel, Miami. For information: Michael P. Small, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

24-28 Practical Pediatrics, Deauville Hotel, Miami Beach. For information: Donald H. Altman, M.D., 6125 S.W. 31st St., Miami 33135.

FEBRUARY

14-19 University of Miami School of Medicine presents "Medical Diagnosis: Truths, Neartruths and Nontruths," Sheraton Four Ambassadors, Miami. For information: J. Bocles, M.D., U. of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

22-27 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

MARCH

14-17 Special Procedures in Diagnostic Radiology, Eden Roc Hotel, Miami Beach. For information: Mrs. Gwen Hendel, Mt. Sinai Hospital, Miami Beach 33140.

17-20 Third Teaching Conference in Clinical Cardiology, Sheraton Four Ambassadors, Maimi. For information: Michael S. Gordon, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

22-27 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

APRIL

19-24 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

National and Regional Meetings Held in Florida

NOVEMBER

6- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach. Ex. Sec.: F. D. Nowlin, 800 Washington Ave., S.E., Minneapolis, Minn. 55414.

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood Beach. Dir.: Joseph J. Eller, M.D., 745 Fifth Ave., New York, N. Y. 10022.

DECEMBER

7- 9 Committee on Injuries of the American Academy of Orthopaedic Surgeons present course on Lower Extremity, Americana Hotel, Miami Beach. Augusto Sarmiento, M.D., U. of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

MARCH

1- 5 Society for Cryosurgery, Diplomat Hotel and Country Club, Hollywood. Sec.: Society for Cryosurgery, 30 N. Michigan Ave., Chicago 60602.

14-18 International Anesthesia Research Society, Americana Hotel, Miami Beach. Ex. Sec.: B. B. Sankey, M.D. 3645 Warrensville Center Rd., Cleveland 44122.

24-26 American Surgical Association, Boca Raton Hotel and Club, Boca Raton, Sec.: G. Thomas Shires, 5323 Harry Hines Blvd., Dallas 75235.

APRIL

18-22 Southeastern Surgical Congress, Americana Hotel, Miami Beach. Sec.: A. H. Letton, M.D., 340 Blvd., N.E., Atlanta 30312.

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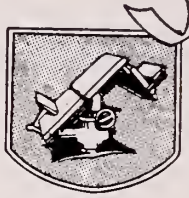
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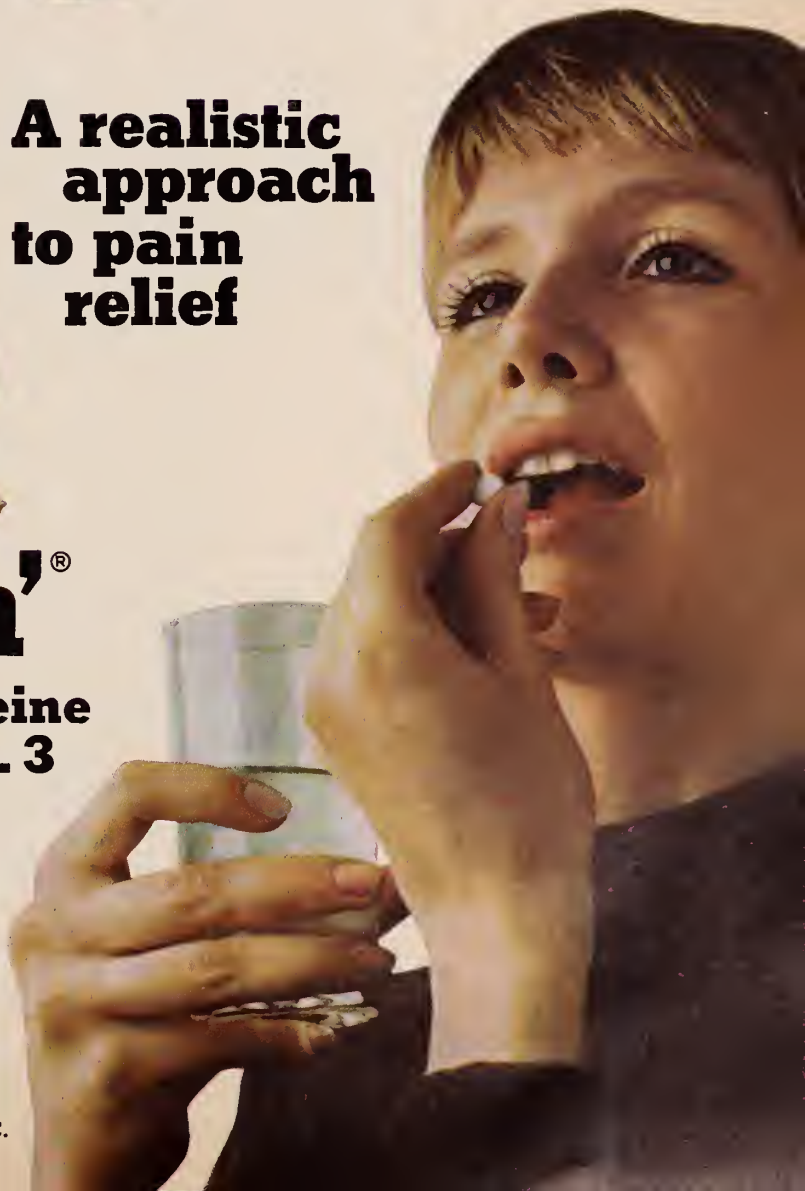


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THE PHARMACOLOGICAL BASIS OF THERAPEUTICS
3rd Edition, page 522



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anxiety: the tyrant

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THE JOURNAL OF THE Florida Medical Association

THE FLORIDA MEDICAL ASSOCIATION, INC. 1849

DECEMBER, 1970 • VOLUME 57 • NUMBER 12

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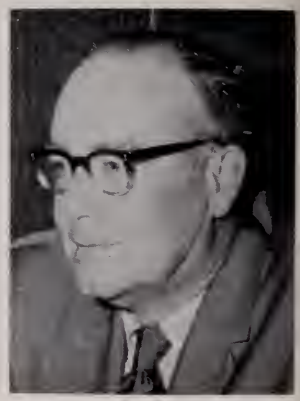
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DECEMBER COVER—In keeping with the season, the editorial staff, in consultation with our artist, Mr. Bill Brinkworth, devised the cover to remind us that our present day search for peace is at least 2,000 years old and probably much older, and to wish each member of the Florida Medical Association a very Merry Christmas.—Ed.

President's Page



Peer Review

Let's talk about something current—peer review.

First of all, there is no question in my mind that the Medicare/Medicaid system is going to need some tall policing. The relatively few cases already processed by the state Peer Review Committee have proven that. On the other hand, I still believe over 90% of doctors are honest—probably 99%. The peer review mechanism, once we have all learned the ground rules and do our paper work correctly, will be necessary only for the select few whose practice characteristics make them objects of suspicion.

I don't like the idea, however, of FMA being an agent of the government to perform review of a doctor's practice. It goes against the grain. I know of some who are strongly criticizing FMA and AMA for even considering taking on this task. I believe their attitude basically is that "Congress set up these socialistic schemes—let Congress police them." Frankly, that was my own idea at the beginning. But it won't work. If SSA tries to police Medicare without our help, the policing will be done either by nonphysicians or by nonpracticing physicians. Neither of these are our peers, and neither can perform the work properly. You and I both know there would be a great howl of protest should we be criticized by other than our peers. As it is, we hear screams when, for instance, general surgeons check a neurosurgeon. How much louder they would be if a record clerk, a lawyer, or even a Public Health doctor, were given authority to do what our peer review committees are doing.

So, we wouldn't like it that way; what's the alternative? I know of but one: We must do the job ourselves. If we don't it will be done for (to?) us. At least, by doing it ourselves, we can be reasonable and have a good appeal mechanism.

What worries me most is the misinformation some people have. The AMA and the FMA strongly oppose Peer Review organizations as proposed by the so-called Bennett Amendment, evidenced by the recent AMA testimony before the Senate Finance Committee on this subject. A recent flier from the American Hospital Association apparently confused a lot of doctors.

My present feeling is that if Congress will give us a decent law to work with, we can do our part of the job. As you know, Congress hasn't even worked out its own part.

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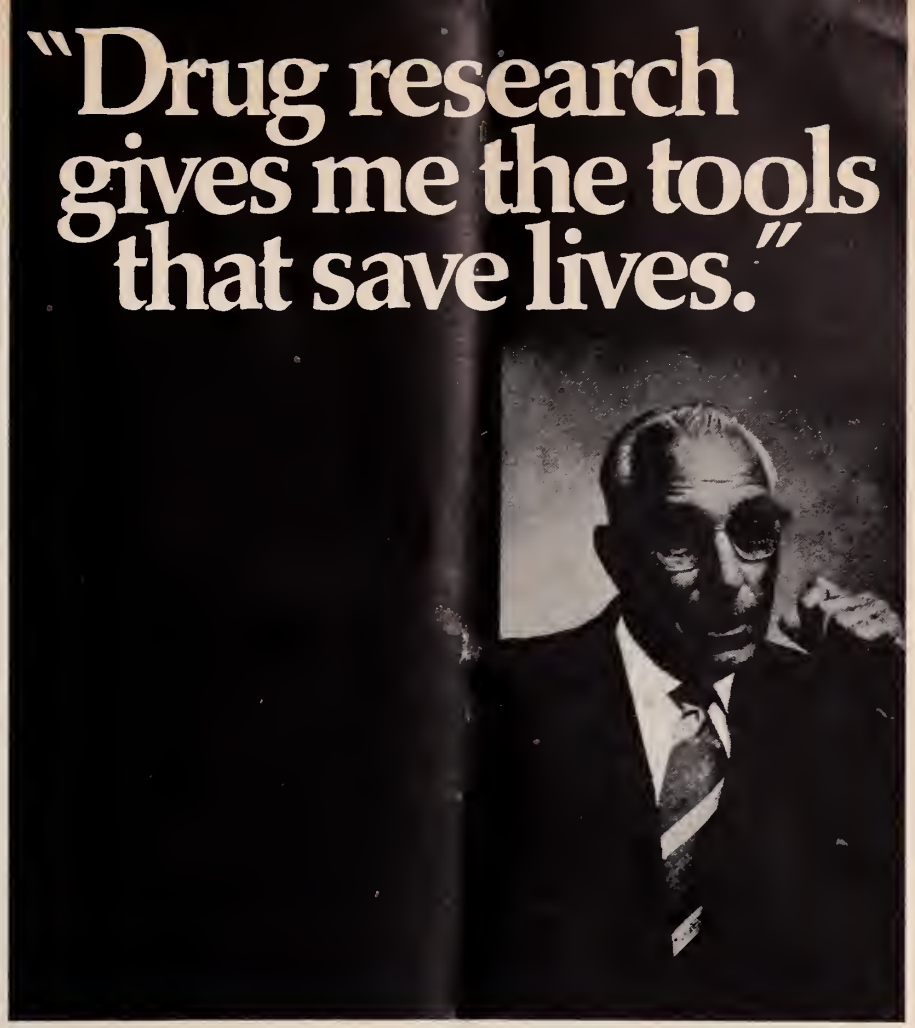


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8—After 11 days of treatment.
ema is seen at site of keratoses. In
on, numerous lesions not apparent
to therapy have become manifest
arply defined reactions. Intervening
also treated, shows no response to
py.

'69—One year after cessation of
py. Skin appears clear with no evi-
e of scarring. Examination reveals
of recurrence or the formation of
esions.



Predictable sequence of therapeutic response

Two to four weeks constitutes a typical course of Efudex therapy. The response is usually characteristic and predictable. After three or four days of treatment, erythema begins to appear in the area of the keratoses. This is followed by an intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of the inflammatory reaction generally occurs two weeks after the start of therapy, and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. A mild erythema may remain for two to three months before gradually receding.

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Efudex is available as a 2% or 5% solution or as a 5% cream. It is applied twice daily by the patient with a nonmetal applicator or suitable glove.

Before prescribing Efudex, however, there are two important considerations. First, please consult the complete prescribing information for precautions, warnings and adverse reactions. Second, advise the patient that treated lesions should respond with the characteristic but transient inflammation. A positive sign that Efudex is working for them.

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

2% and 5% Solutions; 5% Cream Applied twice daily—resolves solar or actinic keratoses.

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Description: Efudex solutions and cream are topical preparations containing the fluorinated pyrimidine 5-fluorouracil, an antineoplastic antimetabolite.

Efudex Solution consists of 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris-(hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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Actions: There is evidence that the metabolism of fluorouracil in the anabolic pathway blocks the methylation reaction of deoxyuridylic acid to thymidylic acid. In this fashion fluorouracil interferes with the synthesis of deoxyribonucleic acid (DNA) and to a lesser extent inhibits the formation of ribonucleic acid (RNA). Since DNA and RNA are essential for cell division and growth, the effect of fluorouracil may be to create a thymine deficiency which provokes unbalanced growth and death of the cell. The effects of DNA and RNA deprivation are most marked on those cells which grow more rapidly and which take up fluorouracil at a more rapid pace. The catabolic metabolism of fluorouracil results in degradative products (*e.g.*, CO_2, urea, α-fluoro-β-alanine) which are inactive.

Studies in man with topical application of ^{14}C-labeled Efudex demonstrated insignificant absorption as measured by ^{14}C content of plasma, urine and respiratory CO_2.

Indications: Efudex is recommended for the topical treatment of multiple actinic or solar keratoses.

Contraindications: Efudex is contraindicated in patients with known hypersensitivity to any of its components.

Warnings: If an occlusive dressing is used, there may be an increase in the incidence of inflammatory reactions in the adjacent normal skin.

Prolonged exposure to ultraviolet rays should be avoided while under treatment with Efudex because the intensity of the reaction may be increased.

Usage in Pregnancy: Safety for use in pregnancy has not been established.

Precautions: If Efudex is applied with the fingers, the hands should be washed immediately afterward. Efudex should be applied with care near the eyes, nose and mouth. To rule out the presence of a frank neoplasm, a biopsy should be made of those areas failing to respond to treatment or recurring after treatment.

Adverse Reactions: The most frequently encountered local reactions were pain, pruritus, hyperpigmentation and burning the site of application. Other local reactions included dermatiti scarring, soreness and tenderness.

Also reported were insomnia, stomatitis, suppuration, scalin swelling, irritability, medicinal taste, photosensitivity and lacrimation.

Laboratory abnormalities reported were leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Efudex should be applied twice dai with a nonmetal applicator or suitable glove in an amount of th solution or cream sufficient to cover the lesion. When Efudex is applied to a lesion, a response occurs with the following sequen erythema, usually followed by vesiculation, erosion, ulceration, necrosis and epithelization. The lower frequency and intensity activity in adjacent normal skin indicate a selective cytotoxic property. Medication should be continued until the inflammatory reaction reaches the erosion, necrosis and ulceration stage, at which time use of the drug should be terminated. The usual duration of therapy is from 2 to 4 weeks. Complete healing of the lesion may not be evident for 1 to 2 months following cessation o Efudex therapy.

How Supplied: Efudex Solution, 10-ml drop dispensers—containi 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Efudex Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

Clinical Studies: The effectiveness of the three preparations as determined by complete involution of solar keratoses was: 2% Solution, 77% of 282 lesions; 5% Solution, 88% of 202 lesions; and 5% Cream, 85% of 189 lesions. In those lesions wher complete involution followed treatment, the rate of possible recurrences observed clinically at periods up to 12 months or mor was: 2% Solution, 4.6% of 218 lesions; 5% Solution, 1.7% of 177 lesions; and 5% Cream, 5.6% of 160 lesions. Because of the toxic potential of fluorouracil, some physicians preferred to use the 2% solution when large areas were to be treated. Approximately 30% of the lesions required treatment for two weeks or less; approximately 78% required four weeks or less for adequate treatment.

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THE JOURNAL OF THE Florida Medical Association

The Medical School-Community Hospital Teaching Program

Willis R. Keene, M.D. and Leighton E. Cluff, M.D.

In January 1970 the Board of Regents of the State University System accepted the Jacksonville Hospitals Educational Programs (JHEP) as a division of the J. Hillis Miller Health Center of the University of Florida. Administrative avenues were thereby created for the development of University of Florida affiliated health educational programs in Jacksonville. The College of Medicine appointed an Assistant Dean for these programs and full time chairmen for the JHEP Departments of Medicine, Surgery, Pediatrics, and Obstetrics-Gynecology, located at the Duval Medical Center,* to facilitate and serve as the hub of the educational programs.

Full time faculty at the Duval Medical Center have academic appointments at the College of Medicine and physicians who practice in Jacksonville and participate in the teaching programs have been and will be appointed to the clinical faculty of the College of Medicine.

The College's Department of Medicine proceeded with development of an administrative organization which established a division of the department in Jacksonville. Equal membership from the faculties in Gainesville and Jacksonville constitute the division's executive committee, whose primary function is establishment of policy. Though the division functions somewhat independently, it is under the general supervision of Dr. Leighton E. Cluff, Professor and Chairman of the Department of Medicine at the University of Florida, Gainesville.

Subspecialty divisions of medicine in Jacksonville complement the subspecialty structure in Gainesville and subspecialty chiefs were appointed in both locations. Educational programs are developed jointly by the various pairs of chiefs under the general supervision of the department chairman in Gainesville and the Chief of Medicine at the Duval Medical Center.

Though the programs in medicine are based at the Duval Medical Center, interns and residents may elect general medical and subspecialty experience in Gainesville and at other hospitals in Jacksonville where St. Luke's, Methodist, Memorial, Riverside, Baptist Memorial and St. Vincent's Hospitals have developed and are developing programs for housestaff and medical students. Planning is underway for a Family Practice residency at St. Vincent's in cooperation with the Departments of Pediatrics and Psychiatry.

The primary mission of the University of Florida College of Medicine is to provide undergraduate, graduate and postgraduate education and training of physicians who will serve the health needs of the State of Florida. The Department of Medicine has a special interest in and responsibility to develop and support programs in medicine which will provide primary physicians. We

Dr. Keene is Associate Professor and Chairman of the Jacksonville Division, and Dr. Cluff is Professor and Chairman, Department of Medicine, University of Florida College of Medicine, Gainesville.

*The new 500-bed hospital and clinics now under construction has been designated the University Hospital of Jacksonville.

feel this objective will not be fulfilled unless the student has an opportunity to learn from and work with practicing physicians. To assure their continued participation in the activities of the Jacksonville division, a practicing internist serves as associate chairman. Three members of the executive committee are practicing internists.

At present there are four full time members of the Department of Medicine faculty in Jacksonville, and it is anticipated that several additional full time physicians will be needed, but the practicing physician will continue to provide the major portion of the faculty time required to support a growing teaching program.

We are grateful to the editors for permitting us to introduce the Jacksonville division of the Department of Medicine in this issue of the Journal. With continued cooperation among the Jacksonville internists and the full time medical school faculty, there is no doubt that the division will succeed and will become a model for other medical school-community hospital programs.

▶ Dr. Keene, 2000 Jefferson Street, Jacksonville 32201.

Acknowledgements

The authors wish to acknowledge the assistance of Mr. Bryant English of the Duval Medical Center, Medical Photography Department, who prepared the photographs for this issue. We also wish to thank Mrs. Jerrylene Barnett who spent many hours assisting with the preparation of the manuscripts.

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This service became available October 1 to all practicing physicians in Florida. By dialing the number of a toll free WATS line and stating the details of their patient's problem (which will be transmitted to the computer in Philadelphia), the physician will receive an immediate verbal report and a hard copy through the mail overnight. The nonprofit cost of the services will be the only charge to the physician. The number to call is: (800)282-6631.

Tobacco Cropper's Sickness

Richard Weizenecker, M.D. and William B. Deal, M.D.

In January 1969 the Department of Medicine at the University of Florida College of Medicine and the people of Lafayette County, Florida, established a Health Clinic in Mayo to serve the outpatient medical needs of the county with a population of 2,800. In July and August 1969, tobacco harvesting time, numerous patients were seen at the Clinic with a chief complaint of "tobacco poisoning" or "tobacco sickness." Little was known about this illness by patients, and nothing was found in the medical literature. Further inquiry revealed that, indeed, most of the lay public in this north central Florida area knew of this entity. Several physicians in nearby counties also had treated patients in the past with the same chief complaint. To more clearly define this illness, clinical and epidemiologic studies were initiated. This is a preliminary report of our observations.

Methods

The files of the Lafayette County Health Center were searched for all patients with a chief complaint of "tobacco sickness" or "tobacco illness." These patients were asked to complete a questionnaire and to send anyone else to the Center whom they knew had had this syndrome. They also were asked to complete the questionnaire. A total of 68 people completed questionnaires with assistance of the nursing staff at the Center.

Results

The age range of patients was nine to 76 years with a distribution which approximated the age of croppers generally. Most tobacco croppers are males which led to a marked male predominance among those with the illness; however, occasional cases were seen in women.

Many patients reported having the illness on several occasions within the past five years but one patient reported episodes occurring on numerous occasions over the past 65 years. Fourteen patients had symptoms before 1950. The age of onset of symptoms correlated well with the age of tobacco croppers, most of whom were in the second decade of life.

Symptoms occurred in 56 (82%) patients while cropping tobacco wet with dew or rain and usually developed within one hour after beginning work. Cigarette smokers, nonsmokers and snuff users reported episodes of symptoms, though there was a predominance (80%) of nonsmokers. No detailed genetic data are available but there was no obvious familial predisposition.

Discussion

"Cropping tobacco" consists of pulling and twisting loose the green leaves from the plant and collecting them in large bundles held underneath the arm against the body. Croppers work bent over in such a way that they can hold approximately the contents of a bushel basket between their arm, the side of their body and the outer surface of the thigh. Cropping begins in the early morning when the tender green tobacco is wet with dew. Minimal trauma to the leaves causes them to weep a gummy sap which stains the croppers' hands and clothing. The croppers' clothing usually is wet from dew or perspiration which may facilitate penetration of his clothing by tobacco sap.

Cropped tobacco leaves are loaded into sleds and transported to tables where the leaves are tied into clusters of two or three leaves and attached to small poles. Poles laden with green tobacco are then placed into a well-insulated barn and "flue cured." "Stringing" of tobacco onto poles is performed by a different crew of workers, usually women, who wear protective plastic aprons and gloves to avoid staining of their hands and clothing.

Tobacco sickness occurs only in workers who allow staining of their skin by sap from Type 14 tobacco. Stringers and their assistants ordinarily do not become ill, presumably because they wear protective clothing.

This illness is characterized initially by a feeling of generalized weakness, followed by severe nausea and protracted vomiting. The period of

From the Jacksonville Division, Department of Medicine, University of Florida College of Medicine, Gainesville, and The Lafayette County Health Center, Mayo.
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nausea and vomiting lasts approximately six hours and subsides spontaneously. The patient usually feels normal on the following day. Treatment with either dimenhydrinate or prochlorperazine produces relief within one hour.

There is a sharp distinction between those people who become ill and those who do not. We have arbitrarily named these groups "reactors" and "nonreactors." Reactors apparently become ill the first time they crop tobacco. Nonreactors never become ill even when working alongside reactors who become violently ill. Those people who perform tasks other than cropping tobacco in the fields have not been noted to have tobacco sickness.

Tobacco sickness does not appear related to intoxication with insecticides since spraying is discontinued before cropping. Heavy rainfall tends to wash away insecticides and, more important, the disease has been known to exist before insecticides were used on tobacco.

We do not believe that nicotine is the agent responsible for tobacco sickness since nicotine intoxication is manifested by nausea and salivation followed by abdominal pain, vomiting and severe diarrhea. This is accompanied by headache, dizziness, hearing and visual disturbances and mental confusion. Respiratory rate and blood pressure increase and the pupils constrict and then dilate. In acute, severe intoxication, convulsions are followed by cardiovascular collapse and death. Among patients with tobacco sickness treated at Lafayette County Health Center, we have never seen a single instance of increased salivation, visual or auditory disturbances, mental confusion, convulsions or death. Only two cases of diarrhea have been reported.

We believe that the emetic substance responsible for tobacco sickness is in the gum exudated from the leaves of wet Type 14 tobacco. Absorption through the skin of reactors produces weakness, nausea, vomiting, and other symptoms of the illness. Tobacco contains pyridine, nitrogenous bases, volatile acids and phenols such as acrolein furfural acid. It is presumed that these or other unidentified materials are absorbed through the skin and produce the symptoms described. Tobacco croppers who are known reactors can prevent illness by the use of protective aprons and gloves.

Summary

An illness occurring among harvesters of Type 14 tobacco is described. Though the illness is common among tobacco farmers in north central Florida, no previous reports have appeared in the medical literature. The noxious material is presumed to be in green tobacco gum and to be absorbed through the skin. Preliminary observations suggest individual susceptibility and that intoxication can be prevented by the use of waterproof gloves and clothing.

▶ Dr. Weizenecker, Department of Medicine, The Johns Hopkins Hospital, 601 North Broadway, Baltimore, Maryland 21205.

It's Your Journal Too

We would like to have more editorials submitted by our state editors and the membership at large. Readers must get tired of thunder from publication headquarters; frankly, we do too, so speak out and we will sign your name, initials or respect your request for anonymity, as you choose. If you don't like something we say, please let us know; we could also stand to hear about it if something should happen to please you. A letter to the editor may help to get something off your chest. We are asking for your contributions and we have a place for them in your Journal.

Exaggerated Delayed Hypersensitivity to Mosquito Venom in Association with Lymphoproliferative Disorders

Jessie G. Houston, M.D. and Willis R. Keene, M.D.

Patients with lymphoproliferative disorders, including lymphocytic lymphomas, Hodgkin's disease, and chronic lymphocytic leukemia are known to react abnormally to many antigens producing delayed hypersensitivity responses. Anergy often occurs to such antigens as PPD, diphtheria toxoid, mumps, fungal antigens, and others.[1-4] But, exaggerated delayed hypersensitivity to mosquito antigen in association with chronic lymphocytic leukemia also has been reported.[5]

This report describes a case of lymphocytic lymphoma associated with dysproteinemia and markedly exaggerated delayed hypersensitivity to mosquito venom. To our knowledge this phenomenon has not previously been reported in association with lymphoma.

Case Report

A 41-year-old Negro female was described in December 1967 as having "lymphocytic lymphoma" after biopsy of enlarged, painless, cervical lympb nodes. She was treated with irradiation to neck, mediastinum and axillae with disappearance of lymphadenopathy.

She continued well until December 1968 wben lymphadenopathy recurred in tbe neck and lymph node biopsy revealed "reticulum cell sarcoma" with increased numbers of plasma cells. Bone marrow aspiration showed involvement by reticulum cells and a plasmacytosis of 30%. Protein electrophoresis demonstrated a total protein of 9.8 Gm.% with gamma globulin of 5.39 Gm.%. Thereafter, the patient was treated witb chlorambucil witb fair results. Nasopharyngeal involvement developed in April 1969 and responded well to irradiation.

In July 1969 lymphadenopathy recurred in the neck again and this increased over tbe subsequent two montbs in spite of cblorambucil treatment. Lymph nodes also enlarged in axillary and inguinal regions and abdominal masses became palpable in the periaortic area. Concommitantly with the flare-up in her disease, the patient, wbo previously had had a mild, immediate reaction to mosquito bites, developed a marked delayed hypersensitivity reaction to mosquito bites on the exposed areas of her legs. Witbin 12 hours after being bitten, marked erythema and swelling of up to 10 cm. in diameter occurred (Fig. 1), and severe itching was a prominent feature. Within 24-48 hours, bullae developed of up to 4 cm. in diameter. Tbese gradually dried up, leaving eschars which separated in 3-4 weeks leaving residual hyperpigmented areas. So impossible was it to avoid mosquitos, there were always lesions during tbe summer months in various stages of bealing (Fig. 2). Histology of the skin affected by a mosquito bite characteristically shows intact epidermis with underlying edema of the dermis, and perivascular infiltration of eosinophils and lymphocytes with some plasma cells and occasional histiocytes. Histology in this patient tbree days after being bitten showed similar changes (Fig. 3), but at six days the changes had progressed to edema of the epidermis witb subepidermal vesicles (Fig. 4) and necrotizing vasculitis with the same cellular infiltrate (Fig. 5). This degree of reaction does not normally occur.

Because of rapidly progressing disease refractory to therapy, she was admitted to the hospital for further study in September 1969.

Pbysical Examination: She was a chronically ill Negro female with obvious masses in her neck. Temperature was 98.6 F and blood pressure 130/76 mm. Hg. She was pale and there were several firm, mobile, nontender, enlarged lympb nodes, 1-5.5 cm. in diameter, in botb anterior triangles of the neck and in both axillae and groins. Liver and spleen were not palpable. The skin was normal excepting below knees, which showed many mosquito bites varying from swelling witb bullae formation through



Fig. 1.—Mosquito bite lesion on knee at 48 hours.

From the Jacksonville Division, Department of Medicine, University of Florida College of Medicine, and Duval Medical Center, Jacksonville.

Dr. Houston is Resident in Medicine, 1969-1971, at Duval Medical Center.

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Fig. 2.—Mosquito bite lesions of varying ages on lower leg.



Fig. 3.—Three-day-old lesion showing perivascular infiltrate of cells.

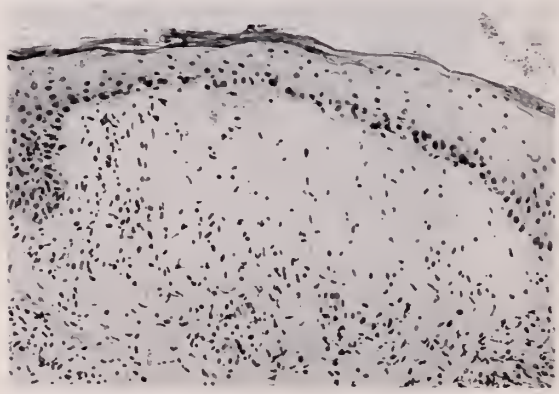


Fig. 4.—Six-day-old lesion showing epidermal edema and subepidermal vesicles.

crusted lesions to hyperpigmented areas, as previously mentioned.

Laboratory Data: Hemoglobin 8.7 Gm.%; hematocrit 29%; WBC 2,900; Differential WBC.: segmented neutrophils 47%, lymphocytes 43%, monocytes 5%, eosinophils 5%; platelets 154,000; total protein 10.5 Gm.%; albumin 3.19 Gm.%; alpha$_1$ globulin 0.1 Gm.%, alpha$_2$ globulin 0.5 Gm.%, beta globulin 0.79 Gm.%, gamma globulin 5.9 Gm.%. Serum agarose electrophoresis is shown in Figure 6.* Direct Coombs' test was negative.

During this admission the patient had irradiation therapy to her neck with good response. Chlorambucil was stopped because of bone marrow suppression. As an outpatient, she continued to have severe mosquito bite hypersensitivity until her final admission to the hospital in December 1969. At this time she had marked generalized lymphadenopathy with increasing cachexia. Her course was rapidly downhill and she expired in January 1970.

Autopsy showed malignant lymphoma of undifferentiated type involving lymph nodes, spleen, bone marrow, liver, kidneys, heart, retroperitoneal space, omentum, mesentery and gastric serosa (Fig. 7).

Discussion

Mosquito venom may produce both immediate and delayed hypersensitivity reactions. Repeated exposure usually results in loss of the delayed hypersensitivity reaction and may produce sufficient

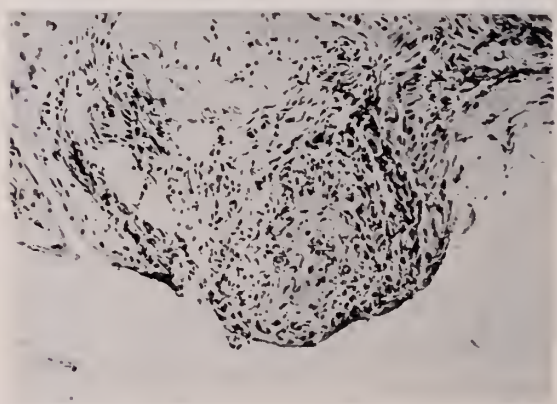


Fig. 5.—Six-day-old lesion showing necrotizing vasculitis and cellular infiltrate.

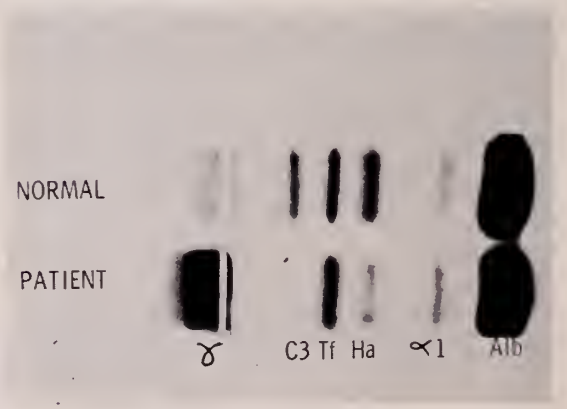


Fig. 6.—Serum agarose electrophoresis: C'$_3$ is absent because of storage of serum sample. Note diffuse increase in gamma globulin. Alb = albumin; Alpha$_1$ = alpha$_1$ antitrypsin; Ha = haptoglobin; Tf = transferrin; C'$_3$ = complement; γ = gamma globulin.

*This study was kindly made by Dr. Neil Abramson, Harvard Medical School, Thorndike Memorial Laboratory, Boston City Hospital, Boston, Massachusetts.

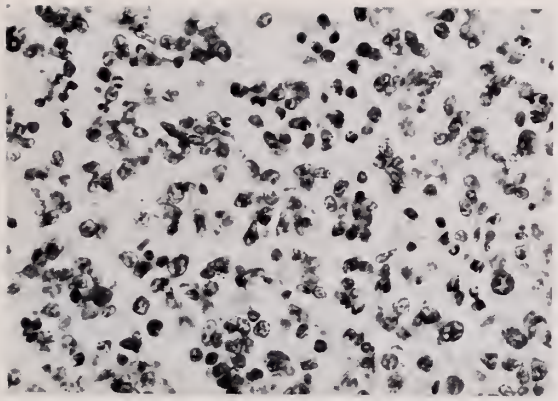


Fig. 7.—Microscopic appearance of lymphoma cells from retroperitoneal space.

desensitization to obliterate the immediate reaction which is characterized by wheal, redness, and pruritus.[6,7] Infants, therefore, usually respond with marked delayed hypersensitivity while adults respond with either no hypersensitivity or a minimal immediate reaction. Sudden development by an adult of exaggerated delayed hypersensitivity implies loss of acquired desensitization.

The mechanism of desensitization is not completely understood, but it is assumed that antigen binds to sensitized lymphocytes preventing further antigen-cell interaction, which must precede the release from cells of soluble materials which initiate the inflammatory reaction.[8,9] Considerable evidence indicates that delayed hypersensitivity to an antigen is mediated by a single clone of small lymphocytes. Each antigen-responsive clone represents a very small fraction of total host lymphocytes.[10] Desensitization, therefore, against a single antigen requires inhibition of the reactivity of a specific clone of small lymphocytes. This is of considerable interest since Weed has shown that patients with chronic lymphocytic leukemia who have exaggerated delayed hypersensitivity to mosquito antigen do not manifest exaggerated reactivity to other antigens capable of producing delayed hypersensitivity, such as PPD.[5] The implication is that delayed hypersensitivity to each antigen is mediated by a separate clone of lymphocytes.

Loss of desensitization by patients with lymphoproliferative disorders might occur by several mechanisms: (a) modification of the desensitizing antigen, (b) qualitative or quantitative change in the antigen-responsive but desensitized clone of cells, or (c) development of a new clone of antigen-responsive cells.

The mechanism of loss of desensitization and the development of exaggerated delayed hypersensitivity by individuals with lymphoproliferative disorders is conjectural. It would seem most reasonable to assume that rapid proliferation of an antigen-responsive clone outstrips the desensitizing capacity of available antigen. A marked increase in the total number of reactive cells might then lead to the release of larger quantities of soluble inflammation producing materials. Since the hyperreactivity seems, on the basis of Weed's studies,[5] to be limited to one antigen only, one clone of lymphocytes is presumed to proliferate. This hypothesis is supported by the development of exaggerated hypersensitivity by our patient during a phase of rapid tumor growth.

Summary

A case of lymphocytic lymphoma with exaggerated delayed hypersensitivity to mosquito venom is reported. Loss of natural desensitization and marked hyperreactivity developed during a phase of rapid tumor growth. Possible immunologic mechanisms are reviewed.

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Intestinal Tuberculosis Mimicking Carcinoma of the Colon

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Tuberculosis of the gastrointestinal tract is uncommon but not a rare disease. It should be considered in the differential diagnosis of many gastrointestinal lesions as it may simulate nontuberculous processes or neoplasm. The incidence has dramatically decreased over the past two decades as reflected by a scarcity of recent case reports. The case reported here serves to emphasize how completely tuberculous lesions of the gastrointestinal tract may mimic neoplasms.

This case also illustrates the problem in establishing the correct diagnosis, since clinically and at laparotomy the patient was thought to have a malignancy of the colon. The ultimate diagnosis rests entirely on histologic evidence.

Case Report

The patient was a 63-year-old Negro woman who had lower abdominal pain for 14 months with generalized weakness, an ill-defined pelvic mass, and a ten pound weight loss in the last three months. She was admitted to the hospital following a barium enema examination which had revealed a constricting lesion of the ascending colon (Figs. 1 & 2).

She had no past history of pulmonary tuberculosis. She denied any episodes of diarrhea, constipation or bloody stools.

On physical examination she was afebrile, had a blood pressure of 140/80 mm. Hg., was moderately emaciated and appeared chronically ill and lethargic. There was no lymphadenopathy and the chest was clear to auscultation and percussion. The heart appeared normal. The abdomen was soft and flat with slight tenderness over the right and left lower quadrants and no organomegaly. No abdominal mass was palpable. The pelvic exmination revealed a very tender, ill-defined mass in the right adnexal region.

Chest film demonstrated a fine fibronodular infiltrate extending into the right apex. Calcifications were present in the right hilum.

The hemoglobin was 11 Gm.%, white blood cell count 8,800 per mm^3. Sputum examinations and gastric washings were negative for *Mycobacterium tuberculosum* on several occasions.

The patient was thought to have carcinoma of the ascending colon and five days after admission an exploratory laparotomy was performed. An intrinsic tumor was found in the ascending colon and adjacent to it were large matted lymph nodes. In addition, there was "peritoneal studding with pin-point tumor implants. . . ." The liver was thought also to be involved by tumor. A right colectomy and ileotransverse colostomy were performed. Also a 4-6 cm. cystic mass of the right ovary was found and a right salpingo-oophorectomy was done. When the operative specimen was opened, ulcerative masses were found in the distal ileum and in the ascending colon. The ileal lesion completely encircled the bowel and was 2 cm. across. The lesion of the ascending colon was 6 cm. distal to the ileoceal valve and was 2.5 cm. across and nearly encircled the bowel wall. On cut section through both lesions, there was dense, white, fibrous-like tissue. In the ileum this tissue extended to, but not through, the muscularis. In the colon this tissue had destroyed the muscularis and extended into the adjacent fat (Fig. 3). Lymph nodes adjacent to the specimen were enlarged and firm, and on cut section many of them had areas of caseous necrosis.

Microscopically, the ulcerations were made up of granulomatous tissue with numerous varying-sized tubercles. Generally these tubercles did not have caseous necrosis and around them was abundant fibrous tissue. Lymph nodes adjacent to the lesion of the colon had numerous areas of caseous necrosis. Acid-fast stains were positive revealing many "beaded" organisms (Fig. 4). Cultures were not obtained. The disease was characterized as ulcerohypertrophic tuberculosis of ileum and ascending colon with lymph node involvement.

The cyst of the right ovary was a hydatid of Morgagni cyst.



Fig. 1.—This demonstrates a circumferential lesion of the midascending colon. Reflux was obtained into the terminal ileum which appeared normal at fluoroscopy.

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Postoperatively the patient was placed on INH 300 mg. per day, PAS 12 Gm. per day, and streptomycin 0.5 Gm. IM daily. She did well and regained her strength and appetite. Repeat chest film one week later revealed clearing of the infiltration of the right upper lobe. Subsequently, she gained eight pounds in a period of one month and has no abdominal complaints.

Discussion

Gastrointestinal tuberculosis is classified into primary and secondary forms. In the primary type, there is no history of pulmonary tuberculosis and the chest film is normal. This type is very rare and the true incidence is not known.

Secondary gastrointestinal tuberculosis is seen most frequently as a complication of pulmonary tuberculosis and, therefore, is more frequent than primary intestinal tuberculosis. Mitchell and Bristol[1] in 1954 reported an excellent study of 5,529 patients with pulmonary tuberculosis, all of whom were subjected to a barium meal examination. They found the involvement of the gastrointestinal tract ranges from 1% to 24.7% corresponding with the severity of the pulmonary infection. Jordon and DeBakey[2] in 1954 reported combined involvement at autopsy in 65% to 90%. Ukil[3] found that of 1,000 cases of intestinal tuberculosis, 95% were secondary to pulmonary disease.

Swallowed bacilli are responsible for most cases of gastrointestinal tuberculosis. The bacilli may be absorbed by the intestinal mucosa. The organisms colonize lymphoid tissue in the submucosa and cause inflammatory response with formation of tubercles. Several sequelae may develop: ulceration, an ulcerohypertrophic form, or a hypertrophic lesion.[4]

Both ulcerative and hypertrophic types are seen in primary and secondary gastrointestinal tuberculosis but in different proportions. Whereas, the ulcerative form is predominant in secondary tuberculosis, the hypertrophic form is seen in the majority of cases of primary gastrointestinal tuberculosis. Sometimes the forms are combined in an ulcerohypertrophic lesion.[5-8]

The ileocecal area is the most common site of tuberculous enteritis followed in decreasing order of frequency by the ascending colon, jejunum, appendix, duodenum, stomach, sigmoid colon and rectum.[1] Hoon et al[4] in an analysis of 58 cases of intestinal tuberculosis reported these clinical findings: postprandial abdominal pain 87.9%, weight loss 75%, nausea 50%, vomiting 50%, fever 37.9%, diarrhea 36.2%, constipation 24.1% and fistula 20.7%.

Anscombe et al[9] analyzed 11 cases of hypertrophic cecal tuberculosis and found that the common clinical findings are rapid deterioration of general health, weight loss, anemia, abdominal pain, change of bowel habit, bloody stool and palpable mass. No clinical difference was found between the primary and secondary forms of intestinal tuberculosis.



Fig. 2.—A spot film of the lesion demonstrates the shelving edges of the lesion. The radiographic appearance of the lesion and its location in midascending colon was felt to be highly diagnostic of a colonic malignancy.

There are no absolute diagnostic features of gastrointestinal tuberculosis on barium studies and the most that can usually be described is the degree and extent of the deformity and the filling defect, and the degree of obstruction. The findings

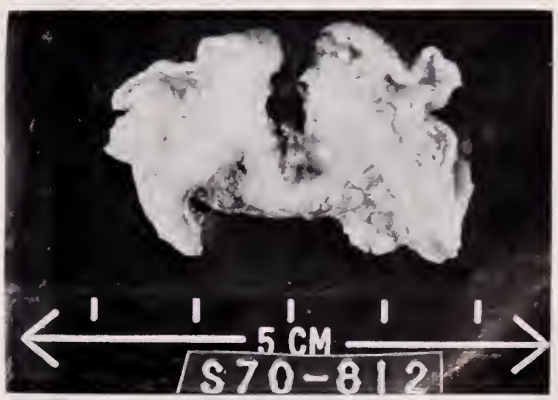


Fig. 3.—Gross photograph of a cut section of the ulcerative lesion of the ascending colon. Note depth of ulceration through the muscularis and the white tissue forming its border.

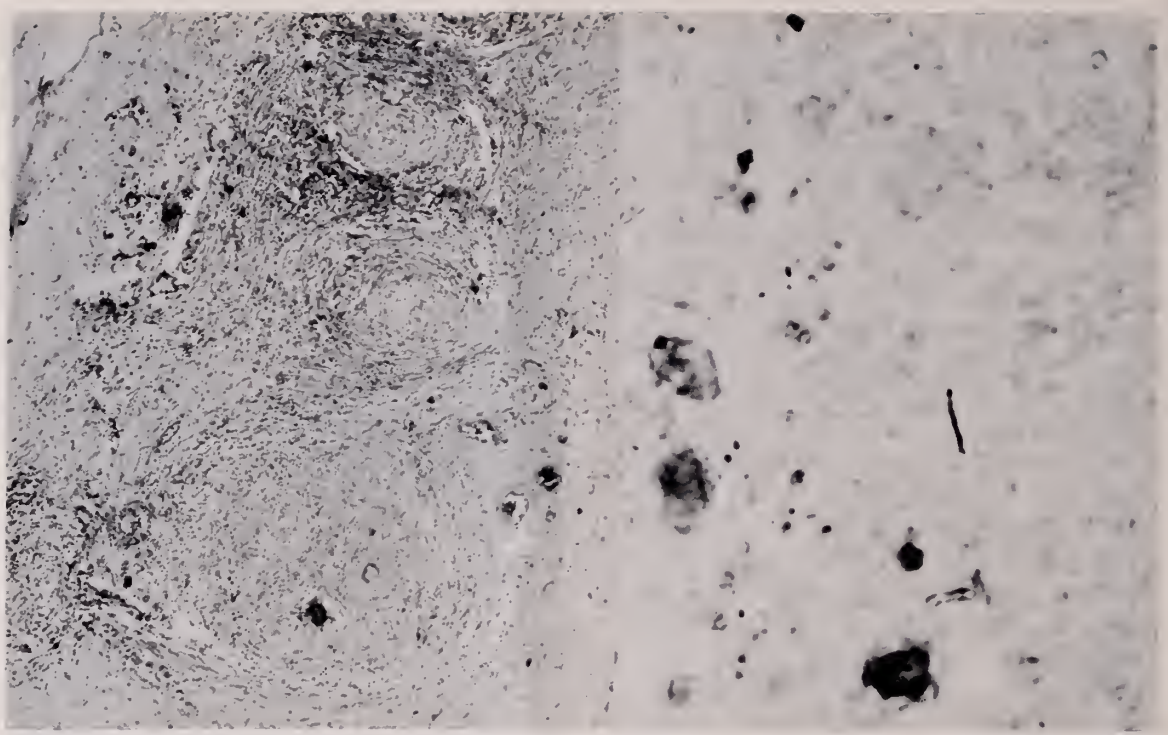


Fig. 4.—(Left) Small, noncaseous granulomas form the margin of the ulcer and are surrounded by fibrous tissue. (Hematoxylin & Eosin x100) (Right) An acid-fast organism found in an area of caseous necrosis in a regional lymph node. (Ziehl-Neilson x1000)

must be differentiated radiographically from malignant and chronic inflammatory processes. However, according to Aird,[11] Stock and Li,[12] there are certain radiographic features which may be helpful to establish the correct diagnosis of ileocecal tuberculosis: shortening of the ascending colon and the cecum; loss of the normal ileocecal angle so that the ileum appears to run straight into the cecum, and absence of obstruction of the terminal ileum.

It is obvious that the diagnosis is extremely difficult because of the protean clinical findings, and inconclusive laboratory and radiographic findings. Often the etiology is obscure even at laparotomy but it is virtually impossible to confirm the diagnosis of intestinal tuberculosis without laparotomy and biopsy. Histologic findings should include granulomatous inflammation with caseation in the lesion or adjacent lymph nodes and demonstration of acid-fast organisms with or without positive culture on animal innoculation.[4,7,13]

The management of secondary gastrointestinal tuberculosis is essentially that of tuberculosis elsewhere in the body. Bed rest, adequate diet and specific drug therapy have yielded good results. Operative intervention should be limited to the management of serious complications in secondary intestinal tuberculosis. In contrast, the hypertrophic form of gastrointestinal tuberculosis, which is most often due to primary disease, will not respond well to drug therapy and requires combined medical and surgical treatment. The resection is safe when combined with long term postoperative drug therapy.[6,14] Abrams and Holden[10] suggested that when the correct diagnosis is known or suspected preoperatively, the patient is prepared for a period of one to two weeks, if possible, with INH 300 mg. and PAS 12 Gm. daily. Streptomycin is administered in a dose of 1 Gm. the day preceding surgery and for one week postoperatively. INH and PAS therapy are continued for 12 to 18 months. While postoperative drug therapy is advised, there appears to be no increase in complication when vigorous therapy is started in the immediate postoperative period.

Summary

A case of secondary intestinal tuberculosis mimicking carcinoma of the colon is reported. The literature is reviewed and several points discussed regarding incidence, classification, clinical events, radiographic features, diagnosis and treatment.

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Obstructive Jaundice in Hodgkin's Disease Due to Infiltration of the Biliary Ducts

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When patients with widespread Hodgkin's disease develop jaundice, most clinicians ascribe the icterus to obstruction by compression of the extra hepatic biliary duct by enlarged lymph nodes or to intrahepatic infiltrative disease. Reviewing the literature in the past ten years we found infrequent mention of infiltrative disease of the common bile duct. In this article we present an unusual case with obstructive jaundice due to infiltration of the gallbladder, common duct, and cystic duct by Hodgkin's disease. A search was made for similar cases among the charts of patients seen at the Duval Medical Center in the past ten years with the diagnosis of Hodgkin's disease, lymphosarcoma, giant cell follicular lymphoma and reticulum cell sarcoma.

Case Report

A 54-year-old Caucasian businessman from Bolivia developed bilateral lymphadenopathy in the neck in May 1967. A biopsy was taken and the diagnosis of Hodgkin's disease established in June 1967. He was treated with irradiation to both sides of the neck, mediastinum and axillary areas with good results. In October 1968 he developed left inguinal nodes and at this time he was treated with nitrogen mustard intravenously. Maintenance therapy with chlorambucil was continued after that time. In November 1968 hematuria and pain in the right flank developed. A right ureteral calculus was removed; at the time of surgery enlarged retroperitoneal lymph nodes were noted.

In August 1969 several enlarged lymph nodes were palpable in the right inguinal area and a two centimeter node in the left femoral area. Nitrogen mustard 20 mg. intravenously was given but there was no response. In September 1969 he returned with further enlargement of lymph nodes in the right and left inguinal areas, in the right hip, and herpes zoster over the left flank area. Irradiation therapy to a total dose of 1000 gamma roentgen was administered to the abdomen, and 2700 gamma roentgens were delivered to the right ileoinguinal region. Thereafter, he did well, excepting anorexia and heart burn relieved by antacids, until ten days before his last admission in April 1970 when he noted dark urine and later yellow sclerae, acholia, and intermittent pain in the right upper quadrant radiating to the back. With these symptoms the patient was admitted to the hospital.

Pertinent physical findings were: Middle-aged, white male appearing chronically ill and jaundiced; one abnormal lymph node about two centimeters in diameter in the anterior cervical chain; no palpable nodes in the axillary, inguinal and femoral areas; hepatomegaly four centimeters below the right costal margin. The rest of the physical examination was unremarkable.

Positive laboratory findings were: Total bilirubin 14.1, direct 7.7, alkaline phosphatase 430 I.U.'s, prothrombin time 15.9 seconds, control 12.9 seconds, hemoglobin 11.6 Gm.%, hematocrit 35%, WBC 6,800, segmented neutrophils 64, stabs forms 10, eosinophils 2%, lymphocytes 19%, and monocytes 5%. Urobilinogen in the urine was absent and the stools were acholic. Serum guanase was 0 units; normal 0-3.5 units. Chest x-ray showed fibrotic changes in both upper lobes and a small amount of pleural fluid in the right side. A diagnosis of obstructive jaundice was made and exploratory laparotomy was performed on the fifth hospital day.

After dissection of the common duct it was found to be thickened and fibrosed. After dilation of the duct with a probe, a T-tube was inserted into the common hepatic duct with great difficulty and a surgical cholangiogram was made. This revealed good intrahepatic ducts but the common hepatic duct could not be visualized and was generally narrowed. A cholecystectomy was performed because the gallbladder was thickened and rigid. No stones were present.

Pathological examination of the gallbladder, cystic duct and liver biopsy showed invasion of these structures by the lymphoma.

After surgery the patient was placed in the intensive care unit. On the sixth hospital day he had an episode of upper gastrointestinal bleeding with demonstrated increased fibrinolytic activity. A good response to 6-aminocaproic acid was achieved. Within 24 hours a pneumonic infiltrate appeared in the right lower lobe and sputum cultures revealed Pseudomonas, Klebsiela, Aerobacter, Candida albicans, and Alpha streptococci. His condition deteriorated progressively in spite of broad spectrum antibiotics and supportive therapy. Congestive heart failure developed and a portable chest x-ray taken on the 12th postoperative day showed dissemination of the infiltrate to both lungs and signs of pulmonary edema. The patient expired on the 17th hospital day.

Discussion

The incidence of jaundice in patients with Hodgkin's disease as reported in the literature varies from 3%-57%. Beatty[1] reported an incidence of 57% after reviewing 40 cases with Hodgkin's disease. Ruven Levitan et al[2] reported an incidence of 13.3% with the largest series of patients reviewed: 875 patients and 116 had jaundice. Kilburn[3] reported an incidence of 68%. Bouroncle et al[4] reported an incidence of 13% after reviewing 615 patients.

In our study of the past ten years at the Duval Medical Center, we found 26 patients with Hodgkin's disease and five of them had jaundice with an incidence of 19% in comparison with 6% in patients with lymphosarcoma and 28% in reticulum cell sarcoma (Table 1). This is close to the findings of Levitan[2,7] in his large series. We found

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Table 1.—Duval Medical Center Patients 1959-1969.

Diagnosis	No. of Patients	Males	Females	Caucasian	Negro	Liver Involvement	Jaundice	%	Mean Age
Lymphosarcoma	17	12	5	10	7	1	1	6%	56
Reticulum Cell Sarcoma	7	4	3	2	5	1	2	28%	70
Giant Cell Follicular Lymphoma	2	2	0	0	2	0	0	0%	40
Hodgkin's Disease	26	15	11	9	17	6	5	19%	45
Total	52	33	19	21	31	8	8	15%	52

Ratio male to female 1.6 to 1.0 in Hodgkin's Disease 1.3 to 1

Table 2.—Patients With Hodgkin's Disease and Jaundice.
(Findings at autopsy or laparotomy).

Patients	Total Bilirubin	Direct Bilirubin	Alkaline Phosphatase	Liver Involvement	Bile Duct Involvement
1	9.0	4.0	3.4 B.U.	+	—
2	13.9	6.5	4.8 B.U.	+	+
3	6.5	3.6	7.4 B.U.	+	—
4	13.6	3.6	2.0 B.U.	+	—
5	14.1	7.7	430 I.U.'s*	+	+

*Normal Values 30-85 I.U.'s

a 4:1 male predominance in patients with jaundice as compared to a ratio of 1.6 to 1 in the whole group. This correlates well with the findings of Beatty.[1]

The older literature expresses the opinion that jaundice in Hodgkin's disease is usually a result of common duct obstruction by involved lymph nodes. Reviewing the recent literature regarding jaundice associated with Hodgkin's disease, we can classify the causes of jaundice into several groups:

Liver involvement alone

Extrahepatic bile duct obstruction and liver involvement

Extrahepatic bile duct obstruction alone, and

Other causes.

Liver Involvement Alone.—This is the most important cause of jaundice associated with Hodgkin's disease; approximately 45% in several series.[1,2,4] Beatty[1] emphasized the importance of diffuse involvement of the portal areas with fibrotic Hodgkin's disease. In our own series three out of five patients fall into this category for an incidence of about 60%.

Extrahepatic Bile Duct Obstruction and Liver Involvement.—This is the second most important cause of jaundice; 24.5% of Levitan's patients and 12.9% of Bouroncle's series. Our patient #2 (Table 2) had significant enlargement of lymph nodes in the extrahepatic bile ducts producing a partial obstruction and also liver involvement by Hodgkin's disease. The patient in case 5 had infiltrative disease of the common duct, gallbladder and liver, as described.

Extrahepatic Bile Duct Obstruction Alone.—Extrahepatic masses accounted for jaundice in 9.7% of Bouroncle's patients, 3.5% of Levitan's cases, and 9% in the series of Beatty. In his series Beatty mentions two cases with obstruction of the extrahepatic bile ducts by paracholodocal lymph nodes. Levitan found also two cases due to compression of the common duct by enlarged lymph nodes. He also mentions two patients with infiltration of the common duct but

the obstruction was only partial and was not the cause of jaundice. In the Bouroncle series nine patients were found to have this type of complication and three autopsy cases revealed Hodgkin's tumor mass with compression of the extrahepatic bile ducts. In those cases the alkaline phosphatase was found to be more than 30 units in all the cases and more than 60 units in 60% of the cases which correlates with the findings in our patient who had marked elevation of the alkaline phosphatase up to 430 I.U.'s.

Other Causes.—Hemolytic anemia occurred in 11.8% of the jaundiced patients in the Bouroncle series; in 2.5% of the patients in Levitan's series. Other cases have also been reported.[6] Coombs positive hemolytic anemia has been reported by other authors[5] with an incidence of 2.7%. Two cases of hepatitis were reported by Levitan with 3.5% incidence in his series. Also, one case of cirrhosis and choledocolithiasis and one case of cholecystitis. Other authors have reported cases of intrahepatic cholestasis.[4] Jaundice has also been reported recently following splenectomy in Hodgkin's disease,[8] hepatocanalicular jaundice,[10] and primary Hodgkin's disease of the liver.[11,12] Jaundice of unknown etiology has been reported with an incidence of between 2.2% and 14%.[1,4,9]

Specific diagnosis of jaundice in Hodgkin's disease is the only basis for rational therapeutic choice. Reviewing the previously reported cases, it is apparent that hepatitis, choledocolithiasis and obstructive jaundice due to enlarged lymph nodes occur with almost equal incidence. However, diffuse hepatic invasion by Hodgkin's is the most frequent cause of jaundice.

Summary

An unusual case of Hodgkin's disease with obstructive jaundice due to neoplastic infiltration of the extrahepatic bile ducts and gallbladder is presented. An analysis is made of a series of 52 patients with lymphoma seen at Duval Medical Center during the past ten years. Fifty percent of those patients had Hodgkin's disease and five of the latter group had jaundice.

The literature is reviewed of the past ten years dealing with jaundice associated with Hodgkin's disease and the therapeutic importance of correct diagnosis emphasized.

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National Insurance is not the Answer

Robert Myers, retired Chief Actuary of the Social Security Administration who has been named consultant to American Life Convention, commented on various national insurance plans in the Washington Insurance Newsletter. Myers says "advocates of socialized medicine" are pushing their proposals at this time because they believe the public can be aroused by sizable increases in medical care costs.

Advocates of national plans, according to Myers, are quite willing, as propagandists, to ignore several significant facts: First, largest increases in health care costs have been for hospitalization—an area considered sacrosanct because 95% of short-stay hospital beds are in nonprofit institutions. Second, relative trend of MD fees in past 5 years has been almost exactly the same as it was in preceding two decades—increasing at about same rate as general earnings level. Third, the illusion is fostered that insurance is magic and has inevitable effect of reducing costs. Actually insurance does not reduce costs in the aggregate, but merely spreads costs among the insured group.

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The Ectopic ACTH Syndrome

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Under normal circumstances the polypeptide ACTH is secreted solely by the anterior lobe of the pituitary gland and is responsible for the functional integrity of the adrenal cortex. The basic control of ACTH release is through the negative feedback, inhibitory influence of circulating plasma cortisol. Other factors, such as stress, fever and hypoglycemia are also capable of stimulating the release of pituitary ACTH.

If ACTH is produced in supraphysiologic amounts and if the adrenal cortex is functionally capable of responding, the clinical syndrome of hyperadrenocorticism, or Cushing's syndrome, results.

Similarly if ACTH is administered to the patient, varying degrees of hyperadrenorcorticism result. The first report that a material similar to ACTH could be extracted from "nonendocrine" malignancies in certain patients with hyperadrenocorticism appeared in 1961.[1,2] Over 160 cases have since been reported. Liddle coined the term "Ectopic ACTH Syndrome."[3] The apparent frequency of reporting such cases has been related to the development of satisfactory biochemical methods for the measurement of adrenal cortical hormones and their metabolites. Many tumors have been implicated in the synthesis and release of ACTH. These include tumors arising from the lung, parotid gland, thymus, pancreas, liver, esophagus, thyroid gland, prostate, colon, gallbladder, breast, pheochromocytoma and salivary gland.

Eighty percent of cases of the ectopic ACTH syndrome are due to carcinoma of the bronchus, thymus or pancreas. The following case of Cushing's syndrome, due to a malignant islet cell tumor of the pancreas, is presented to illustrate certain principles of adrenal cortical homeostasis and the application of those principles to the diagnostic approach and to the rational therapy of this disorder.

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Case Presentation

The patient* (Fig. 1), a 16-year-old Caucasian male, entered St. Vincent's Hospital on 7/16/67 with a chief complaint of a "swelled up stomach." The present illness began approximately three months previously when, while at work on a potato harvester, he fell across a metal bar, landing with most of his weight on the upper abdomen. He fell further onto the ground, landing on his head without loss of consciousness and without dizziness. He was able to get up immediately and continue work. A few hours later nausea and vomiting began and persisted for about six hours but did not recur. Approximately one month following this fall he noted the onset of polyuria, polydypsia and a 20 pound weight gain associated with a marked, persistent, nonpuritic, purplish rash over his entire trunk. There was a rounding of the face, ankle edema and increasing weakness. It was du ing this time that he noticed a nontender, hard mass in the epigastrium which moved with respiration and the appearance of purplish striae about the axillary folds. Shortly before admission a local physician noted hypertension, truncal obesity and a "buffalo hump."

He denied abdominal pain, headaches, visual change, easy bruisability, shortness of breath or other cardiovascular complaints. There were no genitourinary or gastrointestinal complaints other than those previously described. One day prior to admission he was seen by a local general surgeon who considered him to have Cushing's syndrome. The family and social history were nonrevealing. The review of systems was noncontributory.

Physical Examination: Blood pressure 170/105 mm. Hg. right arm, sitting; pulse 80; respiration 16; temperature 98.6F. In general, he was a well-developed, well-nourished, but centrally obese, markedly hyperpigmented, white male in no distress. A diffuse folliculitis was present over most of the skin. The hyperpigmentation involved the trunk, arms, legs, palms and buccal mucosa. Funduscopic examination was within normal limits; there was an excessive amount of fat in the supraclavicular spaces and early buffalo humping was present. The thyroid gland was not enlarged and the lungs were clear. The heart was not enlarged; no murmurs or arrhythmias. The abdomen protruded with the patient supine. The epigastrium



Fig. 1.—Rounding of the face, plethora, striae, acne, obesity and hyperpigmentation are evident. Preoperative.

*Referred to the Burke-Gomez Endocrine Clinic by Dr. Samuel M. Day of Jacksonville.

was filled with a hard, irregular, nontender mass, approximately the size of a grapefruit, which moved up and down with respiration. The extremities were thin. Neither the liver nor the spleen were palpable. The genitalia were within normal limits. Marked hyperpigmentation about the groin area was present. Both the peripheral nervous system and the peripheral vascular system were intact. The rectal examination was within normal limits. Although the patient stated that he was weaker than usual, this could not be well confirmed clinically. The diagnosis of Cushing's syndrome was made due to the ectopic production of ACTH by a pancreatic or an hepatic tumor.

Laboratory and X-ray Findings: The routine urinalysis showed 1+ albumin and 3+ sugar. The two-hour postprandial blood sugar was 272 mg.%. WBC was 14,600 mm^3 with a shift of the Schilling's differential to the left (94% segs.). Blood chlorides were 90 mEq./L, CO_2 combining power 39 mEq./L, serum sodium 145 mEq./L, and serum potassium 1.7 mEq./L. The BUN was 14.5 mg.%, total serum protein 6.8 Gm.% with a normal A/G ratio. Serum cholesterol was 189 mg.%. Alkaline phosphatase was 5.1 Bodansky units. At other times the CO_2 combining power was 42 and 43 mEq./L, associated with marked depressions of the serum potassium. The SGOT was 24 units and SGPT was 36 units. Bleeding and clotting times were within normal limits as was the prothrombin time. Anteroposterior and lateral views of the lumbosacral spine were within normal limits. Skull and chest x-rays were within normal limits. The plasma renin activity, as assayed by Dr. Robert Cade of the University of Florida, was elevated both in the supine and standing samples. The supine sample contained 3.4 ng./ml. and the standing sample contained 4.3 ng./ml. The liver scan revealed no definite abnormalities.

Studies of Adrenocortical Function (Fig. 2): Under "basal" conditions the urinary 17-hydroxycorticosteroids (17-OHCS) were markedly elevated at 75.2 and 78.0 mg./24 hrs. (normal 4 to 10), while the 24-hour urinary 17-ketosteroids (17-KS) were also markedly elevated to 86.0 and 87.1 mg./24 hrs. (normal 5 to 15). In response to the standard "small dose" dexamethasone suppression test, the 17-OHCS showed no change while the 17-KS fell slightly to 52.1 and 49.6 on the first and second day of the test respectively. During the standard "large dose" dexamethasone suppression test (2.0 mg. dexamethasone p.o. every 6 hours for exactly 8 doses in contrast to the "small dose" suppression test where 0.5 mg. p.o. every 6 hours for exactly 8 doses are given) there was a slight fall in the urinary 17-OHCS to 59.8 and 53.8 mg./24 hrs. on the first and second days respectively. During large dose dexamethasone suppression test the 17-KS were 59.8 and 38.1 on the first and second days respectively. During a standard 8-hour ACTH infusion test (50 units of aqueous ACTH in 1,000 ml. normal saline from 8:00 a.m. to 4:00 p.m.) the urinary 17-OHCS and 17-KS showed no significant increases over base line values. During Metopirone testing (750 mg. p.o. every 4 hours for 6 doses) there was no significant change in the 17-OHCS while the urinary 17-KS appeared to drop from a base line of 58 to 32.1 mg./24 hrs. on the first day and dropped further to 14.0 mg./24 hrs. on the day following the administration of Metopirone. (Urinary creatinine coefficients during the day of Metopirone and the day following Metopirone testing were normal). Results of these studies were interpreted, indicating hyperadrenocortisolism produced either by a tumor involving the adrenal cortex or by some other tissue with the ectopic production of ACTH.

Urinary aldosterone was 3.0 μg% (Normal-Bioscience laboratories). Plasma cortisol at 8:00 a.m. was 25 μg%; at 4:00 p.m. the same day was 30 μg%; at 8:00 a.m. the following day after dexamethasone, 1 mg. and phenobarbital, 100 mg. p.o. at 11:00 p.m. the night before, it was 38 μg%. This study was interpreted as demonstrating the absence of cortisol circadian rhythm and ACTH suppressibility. The 24-hour urinary 17-KS were fractionated by gas-liquid chromatography and results are as follows: pregnanediol 2 mg., androsterone 45.9 mg., etiocholanolone 21.2 mg. and dihydroisoandrosterone 12.6 mg. (The total fractionated 17-KS is approximately ten times normal). The 24-hour fractionated urinary estrogens were as follows: estrone 12.5μg, estradiol 21.2 μg, and estriol 12.6 μg. (The total fractionated urinary estrogens was 46.3 μg for 24 hours and is approximately tenfold increased).

Surgical Findings: On the basis of these findings an anterior-approach abdominal laparotomy was performed. A moderate amount of clear fluid was present in the peritoneal cavity. A huge pancreatic tumor extended from the upper third level of the stomach down to a point just below the level of the umbilicus. Multiple nodules were present over the surface of the tumor; some had central softening. The lesser peritoneal sac was opened through the gastrocolic omentum and a part of the tumor measuring approximately 8 x 8 cm. in diameter was taken for biopsy. The adrenal glands were markedly enlarged bilaterally, but no evidence of tumor was found in either of the glands themselves. All obvious adrenal tissue was removed. Several nodules within both lobes of the liver were present, but other evidence of tumor within the peritoneal cavity was not encountered. No attempt was made to resect the pancreatic tumor.

Routine cortisol and fluorinef replacement therapy was carried out during the intraoperative and postoperative periods.

Microscopic Pathology Findings: Microscopically, the tumor tissue was characteristic of a malignant islet cell tumor. The specific type of islet cell involved could not be discerned. The combined weight of the adrenal glands was 16.5 Gm. (upper limit normal, 12 Gm.) and microscopic findings were consistent with cortical hyperplasia. The medullary tissue was relatively inconspicuous. Both adrenal glands demonstrated essentially similar findings.

A quick-frozen specimen of the tumor tissue was subjected to radioimmunoassay for ACTH and was demonstrated to contain 2 milliunits of ACTH per gram of wet tumor tissue.

Postoperative Clinical Course: Although the patient became overtly psychotic on the day prior to surgery, he demonstrated no evidence of psychosis during the postoperative period. One week postoperative the 11:00 a.m. plasma cortisol was 16 μg% (normal). During the first three months postoperative he was maintained on cortisol 10 mg., 3 times daily and fluorinef .1 mg. on Monday, Wednesday and Friday each week. During the first three months following bilateral total adrenalectomy there was a marked subsidence in the clinical manifestations of Cushing's syndrome. This included the disappearance of the plethora, round face, acne and central obesity. The intense hyperpigmentation increased progressively, although the purplish striae decreased (Fig. 3). He was treated with some 12,000 rads. over the upper abdomen without significant change in the apparent size of the tumor by palpation. His strength improved at first and his weight increased from 130 to 144 pounds during the first three months postoperatively. Blood pressure remained normal throughout the postoperative course. Blood sugar was also normal. Beginning with the fourth postoperative month, however, he experienced the onset of low back pain with recumbency and daily evening oral temperature elevation to 100F or 101F. His scalp hair began falling out; nausea, vomiting and epigastric pain occurred and the epigastric mass increased in size. Four months postoperatively he was requiring large dosages of Demerol for back and epigastric pain. Six months postoperatively he died quietly in his sleep.

Discussion

A large variety of clinical syndromes have now been ascribed to the ectopic production of polypeptide hormones. These include Cushing's syndrome, hyperparathyroidism, the inappropriate antidiuretic hormone syndrome, erythrocytosis, Zollinger-Ellison syndrome, gynecomastia in adults, precocious puberty and hyperthyroidism.

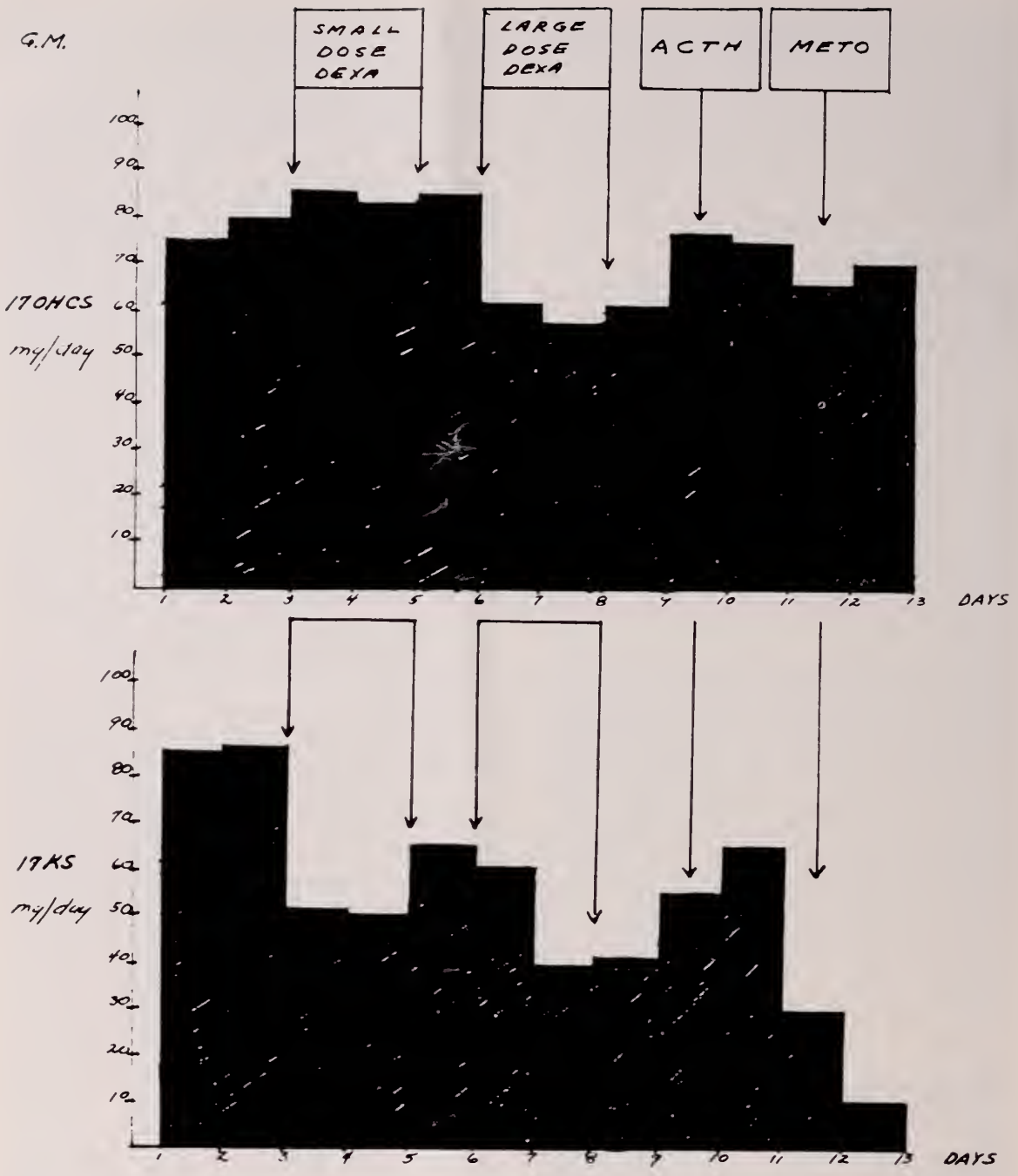


Figure 2.

There is circumstancial evidence that certain lung tumors might secrete substances that cause osteoarthropathy since the latter has occasionally undergone remission following surgical removal of the tumor. When an occult malignant tumor is associated with weight loss, fever, blood dyscrasias and anemia it is tempting to speculate that hormonal agents are involved.

In over 20 test systems the ectopic ACTH found in tumor tissue is biologically, physically, chemically and immunologically indistinguishable from human pituitary ACTH.[3]

The clinical manifestations of the ectopic ACTH syndrome are highly variable. Most of the presenting symptoms are those of the underlying carcinoma. As the disease progresses, increasing evidence of Cushing's syndrome emerges. In most patients the corticosteroid levels are modestly to extremely elevated. In a few cases these levels are only slightly elevated. Males are affected more



Fig. 3.—Note the intense "dirty" pigment over the trunk and arms. Six weeks postoperative.

often than females, and many lack the typical distribution of fat seen in Cushing's syndrome.

The presenting signs of the ectopic ACTH syndrome are often those of wasting, hyperpigmentation and hypertension. As in the case described, laboratory findings often include hypokalemic alkalosis and hyperglycemia. The urinary 17-OHCS are usually very high and do not suppress with large dosages of dexamethasone. Plasma cortisol does not fall during the waking part of the day. Assay of the tumor tissue for ACTH is positive.

Pathologic Physiology: The normal pituitary-adrenal axis (Fig. 4a) is depicted. Under normal circumstances the adrenal cortex responds to ACTH by the synthesis and secretion of cortisol (compound F) as its most significant physiologic product. Normally, cortisol is the only adrenal steroid which is secreted in quantities which are adequate to restrain pituitary secretion of ACTH.[4] The restrained production of ACTH lowers its secretory rate, thereby lowering the secretory rate of cortisol. The lowered cortisol level reduces the amount of ACTH restraint with consequential physiological elevation in ACTH; this in turn increases the production of cortisol. Contrariwise, if the production of cortisol is increased there will be increased inhibition of ACTH release with resultant decreased adrenal cortical stimulation and decreased cortisol production. The normal pituitary adrenocortical axis can be readily inhibited by the administration of small amounts of dexamethasone (0.5 mg. p.o. q. 6H x 8 dosages). Such easy suppressibility is the fundamental basis of the tests which distinguish normal individuals from individuals with hypercortisolism.

Hypothalamic-pituitary Cushing's disease (Fig. 4b) is characterized by the idiopathic production of supraphysiological quantities of ACTH with resultant bilateral adrenal corticol hyperplasia and the production of large enough quantities of cortisol to induce the clinical picture described by Harvey Cushing. These large amounts of cortisol, however, are incapable of suppressing the pituitary production of ACTH. The pituitary production of ACTH, however, can be reduced by giving the patient large quantities of dexamethasone. Thus the large dose dexamethasone suppression test (2 mg. p.o. every 6 hours for exactly 8 doses) affords a very precise way of separating patients with hypothalamic pituitary Cushing's disease from normal persons.

An adrenal cortical adenoma or carcinoma (Fig. 4c) produces supraphysiological amounts of cortisol with resultant marked suppression of pituitary ACTH secretion. In this instance even large dosages of dexamethasone are incapable of suppressing further the already suppressed ACTH secretory mechanism and this finding separates Cushing's syndrome due to adrenal tumor from hypothalamic Cushing's disease.

The ectopic ACTH syndrome due to the production of ACTH by a malignant tumor is shown in Figure 4d. The adrenal cortical tissue responds, in this instance, to the large amounts of ectopic ACTH just as it would to pituitary ACTH and

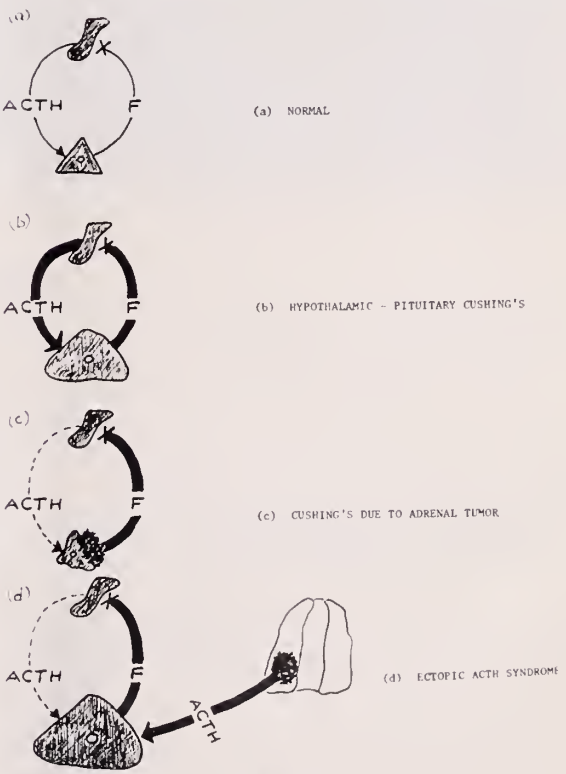


Figure 4.

bilateral adrenal cortical hyperplasia results with the production of large amounts of cortisol. This cortisol suppresses the pituitary production of ACTH thoroughly. Therefore the administration of large dosages of dexamethasone will have no effect on the plasma or urinary corticoids in this instance and only by assay of plasma and/or tumor ACTH can the ectopic ACTH syndrome be conclusively distinguished from Cushing's syndrome due to adrenal tumor. Naturally, the plasma ACTH will be elevated in the ectopic ACTH syndrome while it will be absent or depressed in Cushing's syndrome due to an adrenal corticol tumor.

If urinary and plasma studies for 17-hydroxycorticosteroids are carefully performed the differential diagnosis of the three types of hyperadrenocorticism should not be difficult.

Therapy of the ectopic ACTH syndrome: Two problems exist: (1) the treatment of the underlying carcinoma and (2) the treatment of the bilateral adrenal cortical hyperplasia with Cushing's syndrome. Oat cell carcinoma of the lung, malignant thymoma, islet cell carcinoma of the pancreas and mediastinal tumor other than malignant thymoma are usually not resectable surgically. Contrariwise, surgical cures had been recorded following the removal of malignant pheochromocytoma.

Irradiation of the tumor, particularly when it is located near the surface of the body, is often attempted but usually fails to produce long term remissions. Reasonably long survival has been associated most frequently with the ectopic ACTH syndrome caused by carcinoma of the pancreas. In this circumstance, bilateral total adrenalectomy is often performed in an effort to halt the more pressing manifestations of hypercortisolism such as marked hypokalemia and psychosis. If hypokalemic alkalosis is life threatening, treatment with potassium supplementation, sodium restriction and spirolactone is indicated. In certain cases where bilateral total adrenalectomy is interdicted, Metopirone may be used to partially inhibit the synthesis of cortisol by blocking 11-beta hydroxylation.

Summary

A case of ectopic ACTH syndrome due to a malignant islet cell tumor of the pancreas has been described. The key diagnostic features are clinical signs of carcinoma associated with the varying clinical degrees of Cushing's syndrome. Elevated levels of plasma and urinary 17-hydroxycorticosteroids are found and these are not suppressible even with large dosages of dexamethasone. Tumor tissue excised should contain ACTH. Although treatment of the hypercortisolism can, and should, at times, be accomplished, the inexorable course taken by the underlying carcinoma is one of death to the patient.

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Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

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Editorial

The Mystery of Christmas

To unravel the mystery of Christmas is a fascinating and inspiring experience, for it is the story of the deepest desire of the human heart, the universal yearning for spiritual renewal and refreshment, for escape from the worry and wear of everyday living and fears of the times. It is more than the celebration of the birth of Christ—it is the tinsel-trimmed fir tree, stockings by the fireplace, candles in the window, children awaiting Santa Claus, mistletoe, reunited family gatherings, greeting cards and yule logs. At first glance, most of the traditions appear to have little to do with the momentous birth in Bethlehem but, strange as it seems, our celebrations today are the compounding of the customs of many lands.

In the early centuries, there was little interest in celebrating Christ's birth, for no one knew the exact date and at first the church declared it a sin to even think of commemorating this event. Meanwhile, in Rome, the Christians trying to reshape the pagan world, had their biggest worries at the year-end celebration, known as the Saturnalia, which was a time of unrestrained orgiastic pleasure. Many of the Christians joined the parties and the church fathers realized the faithful needed a spiritual anchor to resist this recurring tidal wave of moral chaos. So, near the end of the fourth century, a Bishop of Constantinople suggested that the birthday of Christ be celebrated on December 25th and while the heathen were busy with their profane ceremonies, the Christians could perform their sacred rites undisturbed. A festival similar to the Roman Saturnalia was annually celebrated by the Norsemen, for they believed that at this season, the fortunes of the new year would be revealed and their gods, led by Odin, would be judging the good and bad deeds of the people. Burning the Yule log produced smoke and fire which, along with horns and yells and loud noises, frightened away evil spirits.

About the same time in Turkey, there appeared a supernatural figure with the custom of roaming the world, giving his fortune to the poor. He began as a fourth century archbishop, Saint Nicholas. He was a generous man, and the patron saint of children and sailors. His legend met Odin's, and gradually in Europe, emerged *Santeklas,* taking Odin's Norse costume and his reindeer and his habit of checking up on misbehaving youngsters, but retaining his legendary generosity. As the patron saint of sailors, a tradition developed of putting out little ships for him and in the lower Rhineland, the children, instead of ships, put out their wooden clogs by the fireplace, for this was the only place a midnight visitor could enter a tightly-locked home.

To defend oneself against the creatures of the winter dark, the Norsemen filled their homes with ivy, holly, spruce and pine, the few growing things that did not lose their green in the desolate winter, and always mistletoe which bore fruit in the winter. Long after the northern part of Europe became Christian, the Yule log was burned ceremoniously each year and the Christmas tree, replacing Odin's sacred oak with the fir tree, developed its present form from an ancient legend that on the first Christmas eve, all the trees and plants of the forest burst into bloom to celebrate the miraculous birth. The tree was resisted at first by the church but spread irresistibly to Vienna and across the ocean to America, being brought by German soldiers sent by George III to put down an annoying revolution.

So, slowly, ever so slowly, Christmas has evolved from gradually transforming traditions inherited from ancient gods, superstitions and the winter solstice into the giving of gifts, holidays away from work, reuniting of families, rebirth of religious faiths and the rededication of lives in service to others. The conflict between spirit and flesh will go on forever, but there is undoubtedly, deep in the human spirit, something that cries out for renewal at this time of the year. Some people will always be tempted to seek it in food and drink and all the pleasures that money can buy; yet, as we look back over the centuries, we can be heartened by a slow, steady progress toward a day in which the best of the old traditions are retained, illuminated by the light shining from a star which appeared over Bethlehem two centuries ago.

C.M.C

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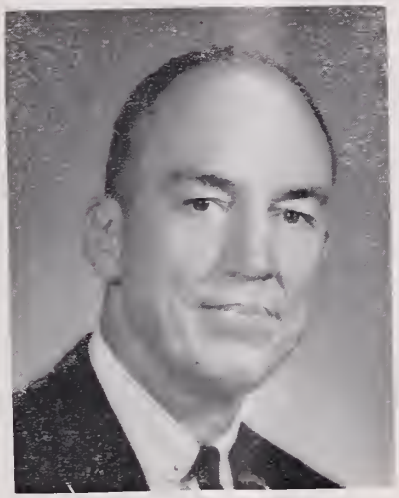
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ORGANIZATION

Dr. Day Re-Elected Chairman



DR. DAY

At the annual meeting of the Florida Health Planning Council, (Comprehensive Health Planning) Dr. Sam Day, who has served as chairman since the formation of the Council, was re-elected for the coming year and Dr. Wilson T. Sowder, our state health officer, was elected vice chairman.

The following four committee chairmen were appointed, which automatically places them on the Executive Committee: Mrs. Richard Malchon, St. Petersburg, Environmental Health; Mr. Michael J. Wood, Jacksonville, Health Facilities; Irving E. Hall Jr., M.D., Bradenton, Health Manpower; and Mr. Richard Brooke Jr., Jacksonville, Health Services.

The following five members were elected by the membership to serve on the Executive Committee: Representative John J. Savage, St. Petersburg, and Mr. Harold Parham, Jacksonville, were re-elected; the new members elected were Senator Beth Johnson, Cocoa Beach; Mr. Harold O'Steen, Jacksonville, and G. T. Wiggins, Ph.D., Pensacola.



W. HAROLD PARHAM

At the fall Board of Governors meeting, Dr. Francis T. Holland, chairman of Florida's AMA delegation, on behalf of the President and Executive Vice President of the American Medical Association, presented a Certificate of Gratitude to Mr. W. Harold Parham, Executive Vice President of the Florida Medical Association "for distinguished leadership and service as Chairman of the first American Association of Medical Society Executives Advisory Committee to the Executive Vice President, 1969-1970." The Board acknowledged the presentation and expressed their congratulations to Mr. Parham.


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*Slanger, A.: Med. Times *94*:150 (Feb.) 1966.

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Letters

Dear Dr. Collins:

Congratulations to you, Dr. Ragland and the guest authors who contributed to the Ecology Issue, Vol. 57, No. 10, October 1970.

Massive personal involvement of physicians, because of their potential role of leadership in the cause of environmental salvage, is long overdue.

Hopefully this issue of the JFMA will be followed by a continuing editorial policy directed toward establishing the physician as a powerful force in development of the medical aspects of the "new progress" of George Cornwell, defined as: "acts of man that enhance life's quality without impairing earth's life support systems.

W. Robert Adams, M.D.
Professor, Department Pathology
University of Florida,
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Dear Dr. Collins:

I wish to apologize for sending this information late, as I have been on vacation and just returned.

As you know, I attended the A.M.A. meeting in Chicago in June and attended the V.P.V.N. luncheon at the Palmer House for the physicians for Viet Nam. This was a rather gala affair as there were one hundred physicians present who had served at one time or another on the A.M.A. Loan Physicians Program. The current President, President-Elect and Vice President-Elect of the A.M.A. were all present as were five leading Viet Namese physicians, the Minister of Health and several professors from the University of Saigon Medical School in Saigon. Several of the physicians there had served as many as four tours in Viet Nam.

The Viet Namese physicians were extremely happy to see some of their old friends that had served in their provinces and, also, to praise the work of the A.M.A. in this southeast Asian country. As the Minister of Health told me personally, when he flew into San Francisco, it was the first time he had visited the United States and he was extremely taken with the freedom of the people wandering about this great city, shopping and enjoying the good times of our American life. He said, "This is all that we want for South Viet Nam. Isn't it too bad that we have to struggle so hard to achieve it?"

At the A.M.A. Chicago convention, the V.P.V.N. exhibit had a complete slide program with sound accompaniment-push button operation, with head phones telling the story of the medical needs and progress of both military and civilian population of Viet Nam and featured nine colored photographs of the V.P.V.N.'s in action. There was a vivid map, plus charts indicating hospitals, clinics and other installations while the register told where every physician in the program has served in his home state. The exhibit assigned a permanent place for attention of the convention visitors acting as a get together clearing house for V.P.V.N.'s and several members of the A.M.A. were assigned and signed up on the spot.

James J. De Vito, M.D.
St. Augustine

MEETINGS

Approved by FMA
Committee on Postgraduate Education

DECEMBER

3- 6 Eighth Annual Cardiology Seminar, Rose Hall Holiday Inn, Montego Bay, Jamaica. For information: Henry J. L. Marriott, M.D., St. Anthony's Hospital, St. Petersburg 33701.

4- 6 Lower Extremity Prosthetics and Orthotics-Recent Developments, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7- 9 Postgraduate Seminar on Lower Extremity, Americana Hotel, Miami Beach. For information: Augusto Sarmiento, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

10-12 Eleventh Biennial Cardiovascular Seminar on Coronary Artery Disease, Sheraton-Four Ambassadors Hotel, Miami. For information: Arthur Gosselin, M.D., Chm., Heart Association of Greater Miami, 5080 Biscayne Blvd., Miami 33137.

11-12 Management of the Emergency Department, Sheraton Four Ambassadors Hotel, Miami. For information: William T. Haeck, M.D., 7061 Old Kings Rd., S., Jacksonville, Fla. 32217.

JANUARY

7-10 Eighth Annual Postgraduate Seminar in Anesthesiology, "Anesthesia and the Nervous System," Diplomat Hotel, Hollywood. For information: Jordan Katz, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

11-12 Infectious Diseases 1971—Treatment and Prevention, Eden Roc Hotel, Miami Beach. For information: Mrs. Gwen Hendel, Public Relations Office, Mt. Sinai Hospital, Miami Beach 33140.

11-16 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

13-16 Postgraduate Seminar in Surgery Art and Science in the Therapy of Difficult Problems in Surgery, Eden Roc Hotel, Miami Beach. For information: Robert Zeppa, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

24-28 University of Miami Annual Seminar on Pediatric and Adult Urology, Sheraton Four Ambassadors Hotel, Miami. For information: Michael P. Small, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

24-28 Practical Pediatrics, Deauville Hotel, Miami Beach. For information: Donald H. Altman, M.D., 6125 S.W. 31st St., Miami 33135.

FEBRUARY

2 Second Medical Education and Research Conference, St. Joseph's Hospital, Tampa. For information: Charles S. Thomas, Dir., Community Relations, St. Joseph's Hospital, 3001 W. Buffalo Ave., Tampa 33607.

14-19 University of Miami School of Medicine presents "Medical Diagnosis: Truths, Neartruths and Nontruths," Sheraton Four Ambassadors, Miami. For information: J. Bocles, M.D., U. of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

22-27 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

MARCH

9-13 "Selected Topics in Roentgendiagnosis; Radiologic-Pathologic Correlations," Fontainebleau Hotel, Miami Beach. For information: Manuel Viamonte Jr., M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

14-17 Special Procedures in Diagnostic Radiology, Eden Roc Hotel, Miami Beach. For information: Mrs. Gwen Hendel, Mt. Sinai Hospital, Miami Beach 33140.

17-20 Third Teaching Conference in Clinical Cardiology, Sheraton Four Ambassadors, Maimi. For information: Michael S. Gordon, M.D., University of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

22-27 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

APRIL

19-24 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

23-24 Seminar on Arthritis and Related Diseases, Sheraton Hotel, Jacksonville. For information: William B. Thirlwell, 2522 Oak St., Jacksonville 32204.

MAY

3- 8 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

24-29 Comprehensive Training in Coronary Care for Physicians, Jackson Memorial Hospital, Miami. For information: Louis Lemberg, M.D. c/o Heart Association, Box 10100, St. Petersburg 33733.

National and Regional Meetings Held in Florida

DECEMBER

7- 9 Committee on Injuries of the American Academy of Orthopaedic Surgeons present course on Lower Extremity, Americana Hotel, Miami Beach. Augusto Sarmiento, M.D., U. of Miami School of Medicine, Box 875, Biscayne Annex, Miami 33152.

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton. Ex. Sec.: D. C. Sabiston Jr., M.D., Duke University Medical Center, Durham, N.C. 27706.

MARCH

1- 6 Society for Cryosurgery, Diplomat Hotel and Country Club, Hollywood. Sec.: Society for Cryosurgery, 30 N. Michigan Ave., Chicago 60602.

7-12 American College of Chest Physicians, "Problems and Approaches to Diagnosis and Management of Cardiopulmonary Failure," University of Miami School of Medicine, Miami Beach. For information: Charles F. Tate, M.D., 1000 N.W. 17th St., Miami 33136.

14-18 International Anesthesia Research Society, Americana Hotel, Miami Beach. Ex. Sec.: B. B. Sankey, M.D. 3645 Warrensville Center Rd., Cleveland 44122.

24-26 American Surgical Association, Boca Raton Hotel and Club, Boca Raton, Sec.: G. Thomas Shires, 5323 Harry Hines Blvd., Dallas 75235.

APRIL

18-22 Southeastern Surgical Congress, Americana Hotel, Miami Beach. Sec.: A. H. Letton, M.D., 340 Blvd., N.E., Atlanta 30312.

MAY

12-15 American Gastroenterological Association, Americana Hotel, Miami Beach. Sec.: H. D. Janowitz, M.D., 11 E. 100th St., New York 10029.

AUGUST

30-Sept. 2 Third Western Hemisphere Nutrition Congress, Americana Hotel, Miami Beach. For information: Council on Foods and Nutrition, American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610.

PUBLISHED TO REPLACE A PREVIOUS ADVERTISEMENT WHICH THE FOOD AND DRUG ADMINISTRATION CONSIDERED MISLEADING

The Food and Drug Administration has requested that we bring to your attention a recent promotional campaign for Garamycin Injectable (gentamicin sulfate) which featured a nationwide *in-vitro* hospital survey involving a comparison of sensitivity patterns of Garamycin Injectable and seven other antibiotics.

The FDA considers the advertising misleading in several respects such as:

The *in-vitro* chart contained in the ads, which compared Garamycin Injectable with seven other antibiotics, implied that Garamycin Injectable is clinically more effective than the seven other compared antibiotics. THE FACTS ARE (1) THAT DIRECT EXTRAPOLATION OF NONCLINICAL FINDINGS TO CLINICAL EFFECTIVENESS IS UNWARRANTED, AND (2) THAT THE ADVERTISED *IN-VITRO* COMPARISONS DO NOT CONSTITUTE A VALID BASIS FOR SUGGESTING THAT GARAMYCIN INJECTABLE HAS GREATER CLINICAL EFFECTIVENESS THAN THE COMPARED ANTIBIOTICS.

The *in-vitro* chart and information contained under the ad heading, "Indications" presented *in-vitro* data results in such a way as to imply that the drug is indicated for Gram-positive bacteria, such as *Staphylococcus aureus.* GARAMYCIN INJECTABLE IS NOT APPROVED FOR INFECTIONS DUE TO ANY GRAM-POSITIVE ORGANISMS.

We emphasize that Garamycin Injectable is approved for use only in infections due to susceptible strains of gram-negative bacteria, including Pseudomonas aeruginosa, and species of indole-positive and indole-negative Proteus, Escherichia coli, and Klebsiella-Aerobacter.



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brand of gentamicin sulfate injection

ch cc. contains gentamicin sulfate equivalent to 40 mg. gentamicin

RIEF SUMMARY

DICATIONS GARAMYCIN Injectable is clinically effective in infections e to susceptible strains of gram-negative bacteria, including Pseudo- onas aeruginosa, and species of indole-positive and indole-negative oteus, Escherichia coli, and Klebsiella-Aerobacter. Bacteriologic studies ould be conducted to identify the causative organism and to determine s sensitivity to gentamicin sulfate. Sensitivity discs of the drug are ailable for this purpose. If the susceptibility tests indicate that the usative organism is resistant to gentamicin sulfate, other appropriate ntibiotic therapy should be instituted.

This drug should be limited to the treatment of serious infections used by gram-negative bacteria, particularly Pseudomonas aeruginosa, oteus and other susceptible organisms, with due regard for relative ntibiotic toxicity. Therefore, the drug should be considered for use gainst gram-negative: 1. Bacteremia; 2. Infected surgical wounds; 3. evere soft tissue infections, including burns complicated by sepsis; 4. espiratory tract infections; and 5. Selected cases of urinary tract infec- on.

ONTRAINDICATIONS GARAMYCIN Injectable is contraindicated in in- ividuals with a history of hypersensitivity or toxic reactions to genta- icin.

ARNINGS Patients receiving treatment with GARAMYCIN should be nder close clinical observation because of the toxicity associated with ne use of this drug. Ototoxicity, vestibular and auditory, can occur in atients, primarily those with pre-existing renal damage, treated with ARAMYCIN Injectable, usually for longer periods or with higher doses nan recommended.

GARAMYCIN Injectable is potentially nephrotoxic, and this should be ept in mind when it is used in patients with pre-existing renal impair- ent. Kidney function diminished by infection of the upper urinary tract ay, however, improve during effective treatment with GARAMYCIN njectable.

Concurrent administration of potentially ototoxic drugs such as strep- omycin and kanamycin or of potentially nephrotoxic drugs such as poly- yxin, colistin, and kanamycin with gentamicin sulfate has not been hown to afford any clinical advantages and, moreover may result in dditive toxicity. Monitoring of vestibular, cochlear, and renal function vill provide guidance for therapy in such cases.

RECAUTIONS In patients with impaired renal function in whom serious nfection develops, serum concentrations of the drug may rise, with con- sequently increased risk of ototoxicity. In these patients or in those in whom recommended dosage or duration of therapy must be exceeded as a life-saving measure, routine studies of kidney function should be performed when possible. These may be supplemented by evaluation of the vestibular and auditory function and measurement of serum concentration of the drug when feasible. Serum concentration of gentamicin should be maintained below the range of 10-12 mcg./ml. to reduce risk of ototoxicity.

Ordinarily, treatment should not be given for more than 7 to 10 days or be repeated unless required for serious infection not responsive to other agents.

As with other antibiotics, treatment with GARAMYCIN Injectable may occasionally result in overgrowth of nonsensitive organisms. If superinfection occurs, appropriate therapy is indicated.

Safety for use in pregnancy or the potential for fetal ototoxicity or nephrotoxicity have not been established. Studies in pregnant animals have not revealed teratogenic or ototoxic effects in the fetus. GARAMYCIN Injectable should not be used in pregnant patients or in women of childbearing age unless its use is deemed advisable by the physician.

ADVERSE REACTIONS The overall incidence of ototoxicity considered related to treatment with GARAMYCIN Injectable was 2.8 per cent (16 of 565 patients). Contributory factors (two or more factors were relevant to most patients) were as follows: 10 had azotemia, 10 received a total of 1 gram or more of the drug, 7 had recently received other potentially ototoxic antibiotics (streptomycin or kanamycin), and 5 were over 60 years of age. Six also had decreased high-tone hearing acuity, which returned to or toward normal in the 4 patients retested.

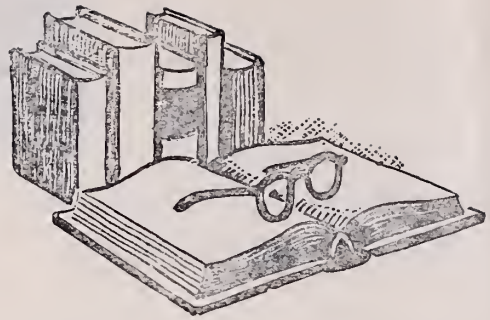
Analysis of BUN data indicated that 4 (2%) of 172 patients showed increases in BUN that were probably related to treatment with GARAMYCIN Injectable. Of 20 increases probably or possibly related to treatment, 7 were reversible, 9 occurred in terminal patients, and 4 had no follow-up.

Other adverse reactions associated with treatment were one instance each of urticaria, decreased hematocrit, and reversible depression of granulocytes with normal bone marrow. Other rarely reported and possibly treatment-related adverse reactions were anemia, increased reticulocyte count, rash, purpura, drug fever, hypotension, convulsions, twitching, salivation, nausea, vomiting, increased transaminase activity (SGOT or SGPT), increased serum bilirubin, decreased serum calcium, and joint pain.

PACKAGING GARAMYCIN Injectable, 40 mg./cc., 2-cc. multiple-dose vials, for intramuscular administration.

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Book Reviews

Surgeon's Choice by Frank G. Slaughter, M.D. Pp. 345. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Publishers have regularly provided the JOURNAL with new editions of books for the medical profession in hopes that printed reviews would entice readers to purchase a copy for their own library. In various issues, new books have been listed so that anyone who wishes may come by and get one or write in for one. Glancing over the list, I saw one entitled "Physical Diagnosis" and stopping by to pick it up, was given the copy of a new novel, "Surgeon's Choice."

Having little time for reading material other than medical journals, I limit most of it to surgical journals, the JAMA and my own County Society Bulletin plus the daily newspaper, so I didn't really think that I would find time to read it but was told to take it along anyway. Reaching home, the book was placed on top of the stack of medical journals in my bedroom and lay there unopened for several weeks. One Saturday night, after picking my boys up from the YMCA, I came home to find that my wife had started the book and so I sat beside her, reading over her shoulder. Soon she became sleepy but, as the Saturday night movie had not reached the half-way mark and the boys were watching this, I continued reading while listening to the violence on the TV screen with one ear. Thirty minutes later the movie ended, the boys left to go to their beds, but I was entranced with the action in the book. I moved from the big chair to my bed, adjusted the light so as not to awaken my wife, propped up on two pillows, and wide awake, read until I reached the end of the book. I looked at my watch; it was 1:30 a.m.

The story is of a brilliant, idealistic and resourceful young surgeon, Gregory Alexander, who, by his ability and integrity becomes the leader of a medical clinic in the ghetto of Baltimore. Its hospital is at the indecisive stage of whether to rebuild the worn out and over-used facility or move to a new location. The old location, secretly to become a business venture of the unscrupulous son of the founder, was to be the means of making a great deal of money for him.

The story takes place during a convocation at the clinic when opportunity becomes ideal for a heart-lung transplant on an aging vaudeville actor from a donor, a murderer who had incurred massive brain damage in an attempt to get away from the scene of his latest crime. The legal and ethical problems of determining the time of actual death of the criminal are well handled. Initially, the transplant is successful but several days later, it appears that the only hope to keep him alive is to put him in their only hyperbaric chamber, which Dr. Alexander had built for experimental heart-lung transplants on dogs. The patient's fate hangs in the balance when tetanus develops in the hand of the son of a Texas millionaire, who may contribute to help rebuild the clinic. Dr. Alexander must decide whether he will save the young boy's life and possibly his arm in the hyperbaric chamber or the life of the world's first heart-lung transplant.

The characters are very life-like. Too many of the doctors appear to be avaricious, callous and unethical. At the beginning of the book a venture into bawdiness places it in running with best sellers of the times. In spite of this, virtue is rewarded and most of the characters live happily ever after. Any reader of the book will be justly proud of the author, Dr. Frank Slaughter, a life member of the FMA.

CLYDE M. COLLINS, M.D.
JACKSONVILLE

A Manual of Antimicrobial Therapy by George A. Panky M.D. Pp. 149. Price $5.50. Springfield, Ill., Charles C. Thomas, Publisher, 1969.

This soft cover book discusses the two classes of antimicrobial agents: chemotherapeutic agents

and antibiotics. The initial chapter discusses the general principles of therapy with these drugs, and the individual agents are taken up by generic name, pharmaceutical name, how supplied, mechanism of action, absorption, distribution, metabolic fate, excretion, toxicity, absolute indications, alternate indications, alternate agents, special features, and practical considerations.

The book is very well organized and useful in this age of newer antibotics and their uses. It would be a very useful guide for the busy practitioner to have, to put these drugs in their proper perspective, without the prejudices of the drug houses.

The author makes some blunt statements—one that nitrofurantoin is an agent with *no* therapeutic indications.

Another chapter deals with a list of microorganisms with preferred antimicrobial agents, and the last chapter outlines the antibiotic treatment of different phases of pneumonia.

Able to be skimmed in less than an hour, this book would be excellent for the doctor to have on his shelf for quick reference.

CHARLES A. DUNN, M.D.
MIAMI

Practical Urology by Chester C. Winter, M.D. Pp. 249. Price $11.00. 251 illustrations. St. Louis, The C. V. Mosby Company, 1969.

This very well organized book covers the field of urology—starting with the very basics and moving into the more sophisticated procedures and diagnoses of today.

A glossary defines all the common urological terms, and catheters and other instruments are described in detail with illustrations. Each organ of the urinary tract is dealt with according to anatomy, physiology, pathology, diagnosis, and therapy. At the end of each chapter there is a series of questions to stimulate the reader. The book is well illustrated with graphs, x-rays, diagrams and pictures. At the end of the book there is a chapter on male infertility and impotence.

This book appears to be a good review of the field of urology, however, it appears to be very brief in many aspects. It would be an excellent book for the non-urologist to have for review and reference. For more detailed information about a particular subject, another more detailed book would be needed. However, it would serve well the practitioner for everyday urological problems.

CHARLES A. DUNN, M.D.
MIAMI

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

War Surgery by Camp H. M. Smith. Pp. 97. Department of Defense, Pacific Command, United States of America, 1969.

The Adolescent Patient by William A. Daniel Jr., M.D. Pp. 444. 76 illustrations. Price $20.50. St. Louis, The C. V. Mosby Company, 1970.

Spectroscopic Approaches to Biomolecular Conformation edited by D. W. Urry. Pp. 314. Illustrated. Price $15.00. Chicago, American Medical Association, 1970.

Kids, Brains, & Learning by Ray C. Wunderlich, M.D. Pp. 534. Price (Clothbound) $10.50 (Paperbound) $7.50. St. Petersburg, Johnny Reads, Inc., 1970.

Wine and the Digestive System by Salvatore Pablo Lucia, M.D. Pp. 157. Price $3.50. San Francisco, Fortune House Publishing, 1970.

Cooking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

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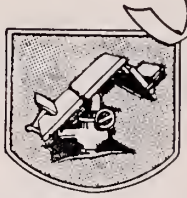
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OF DUKE UNIVERSITY

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Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, music therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapy needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available
Contact (1): Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions
or

(2) Samuel N. Workman, M.D.
Chief of Clinical Services

(3) Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry
and Medical Director

Area Code 704 - 254-3201

Classified Ads

physicians wanted

General Practitioners

EXCELLENT OPPORTUNITY for general practitioner in community of 15,000; central Florida; 76-bed JCAH hospital. Write or call collect Administrator, Bartow Memorial Hospital, Bartow, Fla.

GENERAL PRACTITIONER needed for busy Miami medical group. High income. Tax free benefits. Adequate free time. Contact Burton Feinerman, M.D., 1850 N.W. 183 Street, Miami, Florida. Phone 624-1446.

WANTED: GP as third man in partnership. General practice including some Ob. Boynton Beach area, lower East coast. Phone (305) 732-2701.

GENERAL PRACTITIONER WANTED: TWA Kennedy Space Center, Florida. Challenging opportunity in preventive medicine in variable, industrial setting. Industrial experience and Florida license preferred. Contact or call Ed McGee, TWA, Washington Plaza, Titusville, Florida 32780. (305)267-5031.

Specialists

INTERNIST WANTED: Two cardiologists and one gastroenterologist in the greater Miami area, desire internist with other sub-specialty. Write C-956, P. O. Box 2411, Jacksonville, Florida 32203.

WANTED: Thoracic and vascular surgeon for busy Miami Beach clinic. Telephone Dr. Lighterman 531-7603 or write: South Beach Diagnostic and Medical Center, 627 Washington Ave., Miami Beach, Fla. 33139.

IMMEDIATE OPENING FOR ANESTHESIOLOGIST: Board certified, Florida licensed to head anesthesia department in 350-bed hospital in Miami area. Write C-965, P.O. Box 2411, Jacksonville, Fla. 32203 or call collect (any evening) (305)757-1433.

MEDICAL INTERNIST WANTED: TWA, Kennedy Space Center, Florida. Challenging opportunity in preventive medicine program for aerospace personnel to include cardiac evaluation. Board certified or eligible. Florida license preferred. Contact or call Ed McGee, TWA, Washington Plaza, Titusville, Florida 32780. (305)267-5031.

INTERNIST WANTED: Board certified or board eligible, military obligations completed to join busy surgeon, psychiatrist and ob-gyn specialists in established practice in modern clinic building located in Miami, Florida. Complete laboratory with registered laboratory technician in building. Salary first year, then partnership if mutually agreeable. Fine climate, pleasant practice setting, nearby beaches, recreational facilities, swimming, surfing, boating and fishing. 400-bed, fully accredited hospital within minutes of clinic. Come help me build a group. Address replies to C-966, P.O. Box 2411, Jacksonville, Fla. 32203.

Miscellaneous

ADDITIONAL PHYSICIANS NEEDED: For association, group or solo practice. Fields of practice in short supply: GP, allergy, dermatology, geriatrics, internal medicine, obstetrics and pathology. Two hospitals in county of rapid growth. Contact Carl N. Reilly, M.D., 304 Nesbit St., Punta Gorda 33950. Phone (813)639-1758.

EXCELLENT OPPORTUNITY for internist or general practitioner in established practice on island about 50 miles south of Sarasota, Florida. Present physician leaving June 1971 to take residency. Free use of fully equipped clinic, ambulance, office and utilities provided; also services of registered nurse. Income from practice will be supplemented to make situation extremely attractive. Schools, excellent fishing, golf available. If interested, call (813)964-2475 or (813) 964-2346 or Write Box 517, Boca Grande, Florida 33921, for details.

EXCELLENT OPPORTUNITIES in a lovely location on the Gulf of Mexico for the following practitioners: General practitioner, pediatrician, ENT, and dermatologist. Write C-901, P.O. Box 2411, Jacksonville, Fla. 32203.

EMERGENCY ROOM: Attractive openings for hospital commencing its own emergency room service. $35-$40,000 minimum. Located in North Florida near Jacksonville area. Reply to C-961, P.O. Box 2411, Jacksonville, Fla. 32203.

One part-time EMERGENCY ROOM PHYSICIAN wanted. Compensation and hours of coverage open for discussion. Good opportunity in the future to establish own group. Contact Administrator, Lake Wales Hospital, Lake Wales, Fla. 33853.

WANTED IMMEDIATELY: Private emergency room physician. Corporate group needs fifth physician in teaching hospital, Orlando, Florida. Prefer GP. Florida license required. Contact Bruce S. Webster, M.D. (305) 647-5728 or Robert Gay, M.D. (305) 422-0159.

EXPANDING 20 DOCTOR, multi-specialty group in West Palm Beach, Florida, desires to increase departments with group-oriented specialists with boards or board-eligible in internal medicine (prefer sub-specialty), pediatrics, ENT, ophthalmology, ob-gyn, radiology. Building addition under construction will accommodate 30-35 physicians with further expansion possible in the master plan. Interested parties should send curriculum vitae to Administrator, Palm Beach Medical Group, 705 North Olive Avenue, West Palm Beach, Florida 33401.

PHYSICIANS NEEDED: Tallahassee, Leon County, Northwest. General practitioners, internists and pediatricians in particular. Inquiries regarding practice in this community can be forwarded to J. Orson Smith Jr., M. D., Chairman, Physician Procurement Committee, 1433 Miccosukee Rd., Tallahassee, Fla. 32303. Phone (904) 877-1145.

30 PHYSICIAN multispecialty group located Florida Gulf Coast must add internist, general practitioner, orthopedist, anesthesiologist, urologist, and an ENT physician. Ground broken to add 110 beds to present 202 beds. Ground soon to be broken on large clinic addition. Long range plans to 650 beds and 75 physician clinic. No investment required. Progressive, rapidly growing community with abundance of recreation and cultural opportunities. Contact D. M. Schroder, Administrator, Mease Hospital and Clinic, Dunedin, Florida 33528.

INDUSTRIAL: We are in need of a physician. Salary open; corporate benefits and partnership anticipated. Practice is strictly industrial—examinations and Workmen's Compensation. Write The Mitchell Clinic, P.A., Doctors Building, 241 W. Ashley St., Jacksonville, Fla. 32202.

EMERGENCY ROOM PHYSICIANS WANTED: middle east coast Florida. Florida license required. Minimum $31,000 for 48-hour week. Part time or full time available. Physicians Emergency Service, 1350 S. Hickory St., Melbourne, Fla. 32901.

PSYCHIATRIST OR EXP. GP: Interested in semi-retirement on Florida east coast with private Christian counseling center—supervision, teaching, patient contact, etc. Send resume, beliefs, salary requirement, interests, etc. Florida license required. Write C-955, P.O. Box 2411, Jacksonville, Fla. 32203.

GP OR INTERNIST preferably under 35 for addition to established 4-man family practice group in Cape Kennedy area. Salary first year, partnership thereafter. Complete facilities, including lab, x-ray (consulting radiologist for fluoroscopy) and pharmacy. Contact A. F. Stratton Jr., M.D., Brevard Medical Group, P.O. Box 746, Cocoa 32923, phone (305)636-2621.

EMERGENCY ROOM PHYSICIAN for JCAH fully-accredited hospital. ECFMG required. Subtropical area adjacent to Miami. Send qualifications to Mr. Ralph Settle, Administrator, Keys Community Hospital, 50 High Point Road, Tavernier, Florida 33070.

WEST FLORIDA RESORT COMMUNITY NEEDS PHYSICIANS: Family practice and all specialties. Excellent hospital facilities and the world's most beautiful beaches. A wonderful place to raise your family. John F. Mason, M.D., Secretary, Bay County Medical Society, 518 North Cove Blvd., Panama City, Fla. 32401.

situations wanted

PATHOLOGIST: Florida licensed, native U. S., age 40, excellent qualifications and experience as laboratory director, board certified clinical and anatomic pathology. Desires Florida location to continue active career. Write C-954, P. O. Box 2411, Jacksonville, Florida 32203.

SITUATION WANTED: Soon to retire radiologist would like full or part time position. From December 13 through December 31 will be available for interview at Trafalgar Towers, Apartment 1708, 1400 Ocean Drive, S., Hollywood, Florida 33020.

LOCATION OR ASSOCIATION DESIRED: Florida intern desires association, group practice, or location for solo practice in Florida. Write Larry E. Stevens, M.D., 209 S. Hubert, Tampa, Florida 33609.

GENERAL SURGEON: Florida license, age 34, board eligible, military obligation completed. Desires Florida location in association or group practice. Write C-960, P.O. Box 2411, Jacksonville, Florida 32203.

practices available

OPHTHALMOLOGY PRACTICE AVAILABLE IMMEDIATELY: Fully equipped office in Orlando. Active practice with heavy surgery schedule operated by physician deceased at age 41. Excellent opportunity to assume well established practice with flexible terms. Contact M. W. Wells Jr., 135 Wall Street, Orlando, Fla. 32802.

PRACTICE AVAILABLE, Florida west coast. Ob-Gyn, solo. No investment, just take over lease and patients. Open staff hospitals. Write C-964, P.O. Box 2411, Jacksonville, Florida 32203.

real estate

EXCELLENT OFFICE SPACE AVAILABLE: In the Five Points Medical Center, Oak and Lomax Sts., Jacksonville, Fla. 32204. All utilities and services furnished. For information please call Dr. Max Mendelson at 355-5150.

The Florida Medical Association offers placement assistance through the Physician Placement Service, P. O. Box 2411, Jacksonville 32203. This service is for the use of physicians seeking locations, as well as physicians seeking associates, and is without charge.

Deaths

Ammons, Charlie A., Tampa; born 1914; Louisiana State University, 1958; member AMA; died September 5, 1970.

Blake, Lowrie W., Bradenton; born 1889; University of Maryland, 1914; member AMA; died September 10, 1970.

Brunner, Earlsworth Crockett, Miami; born 1888; Vanderbilt University, 1910; member AMA; died July 25, 1970.

Cravey, George M., Jacksonville; born 1916; University of Tennessee, 1943; member AMA; died October 20, 1970.

Daurelle, George J., Orlando; born 1923; Hahnemann Medical College, 1947; member AMA; died October 19, 1970.

Delgado, Robert E., Orlando; born 1929; Emory University, 1955; member AMA; died October 19, 1970.

Fernandez, Celestino G., Tampa; born 1908; University of Havana, 1941; member AMA; died April 16, 1970.

Flipse, Thomas Edward, Miami; born 1929; University of Miami, 1957; member AMA; died August 7, 1970.

Hopkins, Clack D., Tampa; born 1897; University of Virginia, 1923; member AMA; died July 6, 1970.

Jones, Nathaniel H., Ocala; born 1897; Meharry, 1926; member AMA; died October 15, 1970.

Proctor, Harper L., Jacksonville; born 1886; Chicago College of M & S, 1910; member AMA; died June, 1970.

Shedden, William M., Ormond Beach; born 1892; Harvard University, 1920; member AMA; died August 28, 1970.

Strasser, Hans A., Kissimmee; born 1906; Columbia University, 1935; member AMA; died October 11, 1970.

Turner, John Bogan, Bagdad; born 1882; Vanderbilt University, 1910; member AMA; died July 11, 1970.

Weekley, Augustine S. Sr., Lutz; born 1893; South Carolina Medical College, 1915; member AMA; died August 31, 1970.

Whitaker, Harper E., Tampa; born 1883; Hahnemann, 1910; member AMA; died September 25, 1970.

Williams, R. Reche Jr., Tampa; born 1916; Meharry, 1941; member AMA; died August 6, 1970.

Here's a sign we saw on an automobile bumper . . . and we think it makes a lot of sense . . . "If you don't like the police—the next time you need help—call a hippie"

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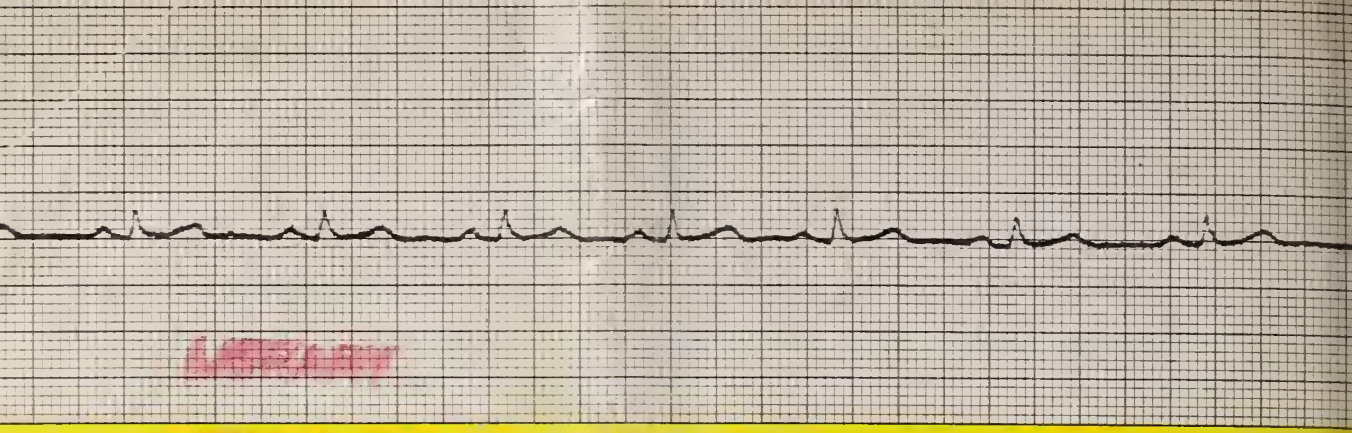
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When disease is ruled out and psychic tension is implicated

Valium® (diazepam) helps relax the patient and relieve his somatic symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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